1-1-1991

Toward the establishment of a cognitive developmental model (CDM) of supervision.

Edward Anthony Shaughnessy
University of Massachusetts Amherst

TOWARD THE ESTABLISHMENT OF A COGNITIVE DEVELOPMENTAL MODEL (CDM) OF SUPERVISION

A Dissertation Presented

by

EDWARD ANTHONY SHAUGHNESSY

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 1991

School of Education

TOWARDS THE ESTABLISHMENT OF A COGNITIVE DEVELOPMENTAL MODEL (CDM) OF SUPERVISION

A Dissertation Presented

by

EDWARD ANTHONY SHAUGHNESSY

Approved as to style and content by:

John Carey, Chair

William Matthews, Member

David Buchanan, Member

Marilyn Haring-Hidore, Dean
School of Education

I wish to dedicate this work to my parents, William & Laurel Shaughnessy, and to the extended family of Shaughnessy and Balon they represent. Just as so many contributions enabled this dissertation to exist at this point in time, so too, I hope as astonishing a spiritual gathering is possible for my family from time to time.

I wish to thank those whose uncommon help enabled me to complete this dissertation: Jay Carey, whose intelligence, generosity and good heart consistently supported my efforts; Pamela Reich, whose support and forbearance allowed me to proceed; Rebecca, who put things in perspective; Allen Doe and Ellen Sedlis, who emotionally anchored me when I needed it most; Mikey Urdang, who was willing to make a deal; the many others who directly assisted this project; and those who made allowance for my preoccupation and otherwise aided and abetted my efforts.

Thank you.

ABSTRACT

TOWARDS THE ESTABLISHMENT OF A
COGNITIVE DEVELOPMENTAL MODEL (CDM) OF SUPERVISION

MAY, 1991

EDWARD ANTHONY SHAUGHNESSY,

B.F.A., UNIVERSITY OF MASSACHUSETTS

M.Ed. LESLEY COLLEGE

Ph.D. UNIVERSITY OF MASSACHUSETTS

Directed by: Professor John Carey

Three studies were conducted using Q-Sort methodology to investigate: (1) the relationship between counselor's level of experience and the conceptual systems they utilize in understanding supervision discourse, (2) the construct validity of the Cognitive Developmental Model and (3) the feasibility of using open Q-Sort methodology to study qualitative differences in the complexity of conceptual systems. Results suggest there is a link between counselor's conceptual systems and their level of experience, the CDM has construct validity and Q-Sort methodology is an effective device when used to evaluate qualitative differences in the complexity of conceptual systems.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

SUPERVISION MODELS AND THEIR RELATIONSHIP TO COGNITIVE DEVELOPMENT

A. Introduction

Supervision from a developmental perspective has, in a relatively short time, become the "zeitgeist of supervision thinking and research" (Holloway, 1987). Worthington (1987) notes 17 different supervision theories that he considers to fit within the developmental rubric and several more have been added since his paper went to press. This has prompted at least one author to propose a moratorium on model construction in the interests of examining the premises upon which these models are built, and constructing research methodologies that effectively examine them (Borders, 1989).

It is the purpose of this chapter to review the literature on developmental supervision with particular attention to three of the more recently proposed models and their link to adult cognitive development. Several themes will be examined. First, what assumptions are made with regard to supervision process? Second, what do models focus upon when defining how they are useful? Third, how are models situated with respect to theories of adult development? A review of developmental supervision will be conducted relevant to these three questions, followed by a more detailed analysis of three contemporary supervision models: Blocher (1983), Stoltenberg and Delworth (1987) and Carey and Shaughnessy (1990).

B. Developmental Supervision Theories

1. Assumptions About Supervision

a. Introduction

Most developmental supervision models maintain similar assumptions. These can be organized into three subject areas: (1) supervision is conceptualized as counselor training, (2) stages, as opposed to phases, are delineated as the structural elements and (3) the development of supervisors is ignored. The second assumption, that models are conceptualized as stages, can be further articulated to include four additional assumptions associated with stage concepts: (a) stages of development are discrete entities, (b) movement between stages is unidirectional in nature, (c) movement between stages is irreversible and (d) the development thought to occur at each stage is defined as extending across all domains of counselor experience.

b. Supervision as Counselor Training

Supervision is invariably conceptualized as the supervision of students within an academic, practicum or internship setting (Worthington, 1987). Logic suggests that supervisees must therefore ordinarily be novices to the phenomena of counseling and supervision. This in turn suggests that the study of supervision is primarily involved with the lower order skills and processes relevant to the novice counselor (Lambert, 1980; Holloway, 1987).

This concentration on student supervisees has confounded the research on supervision by introducing a

number of limiting variables. For instance, research is often based upon the supervision of masters level trainees by doctoral trainees (see Worthington, 1987). This raises questions regarding the degree of expertness of the supervision provided. Many doctoral supervisors are without professional experience as counselors and are providing the supervision as part of their first seminar on supervision. Can the results of research based on the work of novice supervisors be reasonably extrapolated to represent the field of supervision?

Evaluation of supervision is complicated by the presence of multiple supervisors. Supervision usually occurs at two sites simultaneously, the university and the practicum or internship placement. On site, multiple supervisors may be involved. At the Children's Hospital in Boston, psychology interns regularly participate in an average of three individual supervisions per week plus a variety of group supervision formats such as rounds.

Within the university context, supervision of practicum and internship students is often provided in a group rather than individual context. This raises questions regarding the specificity of the supervision provided to any one trainee. It also suggests that models of development, if based upon group supervision dynamics, may represent models of group development as opposed to supervision development.

Assessment of the student motivation is also confounded. Supervision represents a grade included in the

cumulative average of the student. Solving the problem represented by counseling can easily become confused with solving the problem represented by an instructor within a relationship with a power differential that is represented quantitatively as a grade. (see Liddle, 1986; Holloway, Freund, Gardner, Nelson & Walker, 1989).

Another result of this preoccupation with training programs is the absence from consideration of the group most likely to evidence higher order skills, professionals. This absence is mirrored by the paucity of descriptors for higher level skills and process within models that regularly incorporate such concepts. Terminal stages in developmental supervision models, rather than introducing new skills relevant to a new stage, are normally described in terms reflecting the integration of skills already mastered at other stages. Table 1.1 illustrates how the terminal stages of various models reference the consolidation of previously learned skills (Worthington, 1987).

Table 1.1

Terminal Stages of Developmental Supervision Models

Theorist	Terminal Stage
Stoltenberg et al (87)	Level 3 Integrated
Friedlander et al (84)	Eclecticism
Miller (82)	Autonomy
Loganbill et al (82)	Integration
Yogev (82)	Solidification & Evaluation
Stoltenberg (81)	Independent Practice
Littrell et al (79)	Self Supervising

c. Stage vs. Phase

Paired with the concentration upon lower end skills is the tendency to represent developmental models as stage progressions. This representation leads to a series of related impositions that limit the applicability of the models by constricting them within a canon associated with stage theories. This includes defining the content of stages in terms that establish their discrete nature separate from one another, defining the movement through stages as unidirectional, defining the movement through stages as irreversible, and describing the content of each stage as inclusive of the entire domain of counselling knowledge.

A developmental progression expressed as phasic in nature offers a flexible passage. Phases are generally defined as interrelated. Movement between phases can be cyclical in nature and contingent upon a variety of contextual circumstances. Learning associated with one phase may help establish the basis for a quicker adaption to new materials that require the same phase progressions within different domains of knowledge and/or experience. The mastery of one phase within one skill domain need not imply the mastery of all skill domains within that phase.

The practical difference between stage and phase is epitomized by the experience of counselors in training. The trainee experiences several different training sites in succession. In each site a different context surrounds the

supervision experience. Within stage development concepts, the learning required to reach any given stage need not be repeated. Thus, if a counselor reaches stage three of a particular developmental schema while at one site, there should be no need to repeat stages one and two at the next site. Within phase development concepts, the learning required to reach a given "stage" is often repeated relevant to changing contextual factors that define each particular site. It is the functional nature of the adaptive process that remains constant while the context and skill demands change and require repetition of the phase progression.

For instance, Ard (1973) describes a supervisory model within the concept of professional identity development. It includes five stages: Perceptorship, Apprenticeship, Mentorship, Sponsorship and Peership. If the third stage, Mentorship, were to be accomplished within one year at the Dibbletree Counseling Center, stage theory dictates that the counselor trainee should have mastered all the skills necessary to function effectively as a counselor at this stage and, having reached Mentorship, the previous stages of Perceptorship and Apprenticeship should be achieved forever.

A phase design would imply that, even if the "stage" of Mentorship were mastered during that first year, the following year's practicum placement at the Whoofergag Counselling Center, working with a new population of clients, a different staff, a different supervisor, different models of therapy and a different administration,

might require another passage through the preceding phases. During this second passage, the concentration and emphasis of the trainee's work within each previously visited phase would probably change. Different aspects of each phases' concentration would receive attention and the overall passage to Mentorship would probably be quicker now that an experiential model exists. As experience builds, earlier phases may only be included in the most incidental manner. Thus, viewed as a phase progression, learning is a cyclical process where the different phases are repeated due to changing contextual demands.

The notion that mastery of the entire domain of counselling knowledge is possible simply by mastering stages questionably allied to a varied assortment of skill domains is questionable. This is particularly true when one considers the number and variety of skill domains resident within the domain of counseling knowledge and the multiplicity of factors represented by contextual demands. For instance, consider the number of contextual variations and the likely variance in skills necessitated by working with latency age vietnamese farmers, affluent suburban caucasian adults and adolescent inner city Puerto Ricans. Each of these groups requires effectiveness in quite different skill domains, and each group requires different applications of skills from the same skill domains.

Loganbill Hardy and Delworth (1982) provide an example of a phase design. In it they assume that the issues of

competence, emotional awareness, autonomy, theoretical identity, respect for individual differences, purpose and direction, personal motivation and professional ethics are recurrent throughout the professional lifespan of the counselor. Supervisees coping with these issues pass through the stages of stagnation, confusion and integration as they continually address them in new forms. This is a realistic appraisal of professional practice.

The assumption of stage dynamics by the vast majority of developmental supervision theorists is the likely result of imposing lifespan developmental stage concepts upon what are essentially phase progressions. The use of the word "development" appears to have exerted a magnetic pull. Structural ideas associated with developmental theorists such as Piaget (e.g. Piaget, 1929) have been assumed to be essential to these supervision models. Thus the dichotomous, unidirectional, irreversible and cross domain nature of most lifespan developmental theories have appeared within supervision models that actually describe functional aspects of development such as what issue is relevant to the counselor at what time.

Most developmental supervision models quite adequately describe a phase progression through contextual or experiential domains and function effectively when viewed within that context. However, when constricted by stage concepts, it becomes necessary to establish which skills are effectively mastered at which stage and to provide evidence

that these skills are capable of being transferred across widely varying contexts, something few theories are prepared to attempt.

One model, Stoltenberg and Delworth (1987), integrates a phase structure within a stage model. As illustrated in Table 1.2, they articulate four levels of supervisee development. This includes three overriding structures that must be considered at each of the four levels and eight skill domains relevant to each of the overriding structures. This model will be discussed in more detail in Section D.

Table 1.2

Stoltenberg & Delworth's 1987
Developmental Supervision Model

(Stages) Levels	(Phases) Overriding Structures
1. Level One	1. Self & Other Awareness
2. Level Two	2. Motivation
3. Level Three	3. Autonomy
4. Level 3 Integrated	

Skill Domains

1. Intervention skills	2. Assessment Techniques
3. Interpersonal Assessment	4. Client Conceptualization
5. Individual Differences	6. Theoretical Orientation
7. Treatment Goals and Plans	8. Professional Ethics

An additional problem with stage concepts within supervision models is the implication that students must begin at stage one and will reach the highest "stage" of development with some regularity. Within models focused upon lower level skills and process this may be plausible. It is also plausible if the development is considered to be

phasic in nature and thus incorporates the perspective of repetition dependent upon contextual demands. However, when the final stage is associated with the term "master counselor" and conceptualized as the terminal stage in an irreversible progression, credibility is shaken. At such times the illusion is created that master counselors emerge from university programs much like virgin deities on the half shell of their degrees. They are capable of all things but have not been sullied by professional employment. While possible, this flies in the face of common sense and is inconsistent with adult developmental concepts.

d. Supervisor Development

Developmental supervision models, and supervision models in general, glide over the subject of how a supervisor becomes a supervisor. In the earliest models it was assumed that supervisors were masters of the theory of counselling within which they supervised. Thus a master of one school of therapy, such as psychoanalysis, would supervise less experienced therapists of the same school.

While this structure has obvious construct validity, it ignores the essential issue represented by supervision theorists; that supervision is different from counseling, demands different skills and requires different training. Jack Wideman's (1970) review of client centered training programs notes this difference in reporting that the behavior of faculty/supervisors stood in obvious contrast to the behaviors suggested by the theories within which the

students were seeking to become effective. This reflexive incongruity, attributable to supervisor inconsistency, hindered the instruction by creating confusion in the supervisee's mind.

Worthington (1987) notes that supervisor's are like newly bottled wine left uncorked; there is no development. He suggests that levels of supervisor skillfulness are varied, criterion used to evaluate skillfulness is varied and correlations between supervisor experience and increases in skill are negligible (Worthington, 1987).

This blind eye turned towards supervisor development is inconsistent with the premise of developmental supervision models. Developmental models take as their starting point that the experience of becoming a counselor is a unique developmental progression that necessitates a technology of supervision distinct from that of counseling. Given this orientation, it is logically consistent that developmental models address the subject of how a supervisor develops and becomes competent in this role.

At present, the models themselves appear to be the only offering that the literature makes towards the training and recognition of competency in supervisors. Consistent with, but in contrast to, Worthington's vintage metaphor, I would suggest that at present, supervisor development is more like a random selection of wines suddenly being awarded Grand Cru status simply because they are older. Age, as the only essential ingredient, is more likely to create vinegar.

2. Focus of Utility

Supervision models attempt to be helpful by focusing upon understanding and helping the supervisee from two essential points of view: (1) models of becoming a counselor and (2) models of training in counselor education. In the first case, a theory of supervisee development is described that articulates how supervisees change over time as they become more competent. In the second case a theory of intervention is articulated that describes what the supervisor can do to help facilitate increased competency in the supervisee (Holloway, 1988).

The hallmark of developmental theories of supervision is the combination of both devices within developmental progressions. These progressions are described, and suggestions are made, regarding the proper environment for the supervisor to maintain in order to enhance the supervisees growth at each step of the progression. This adaption of an essential developmental design is common to many theoretical systems concerned with learning and the management of performance.

As is common with disciplines where model building is relatively new, early developmental models tended to focus upon limited aspects of the supervisees' experience such as the dependency conflicts of the supervisee, learning style or professional identity. It was assumed that successful development through these domains would result in effective mastery of the skills necessary to be a competent counselor.

Despite the complication of assuming overall development would generalized from a limited focus, and the obvious disagreement regarding what to focus upon, models of developmental supervision remained consistent in their assumption that learning, when it occurred within an environment geared towards practical mastery, took place along a developmental continuum. Models prescribed roughly similar supervisor environments: (1) when tasks are new, direction is needed, (2) when tasks are better understood, limited direction is still required and support is needed for independent action and problem solving, (3) when tasks are understood but not mastered, direction can be eliminated in favor of support for independent analysis and action, and (4) when tasks are mastered, fully independent action is possible and peer relationships enjoyed.

This essential unity of design is demonstrated in Table 1.3, which shows a collection of first and last stage interventions suggested for supervisors (Worthington, 1987). This illustrates that the supervisee begins in a position where direction is necessary to a role where delegation and independence can be enjoyed.

This sequencing of supervisor environments, relative to the "stage" of the supervisee's acquisition of new skills, conforms to the conventions of phase rather than stage designs. It is defined generally and requires no reference to particular skill domains. It is assumed that learning in any domain of knowledge will follow the same basic sequence,

and it is further assumed this sequence will be repeated whenever new tasks are learned, new skill domains encountered or essential alterations in context occur.

Table 1.3

First and Last Stages
Supervisor Interventions

Model	First Stage	Last Stage
Blount (82)	Didactic	Collegial Consult
Hogan (64)	Tuition	Mutual Consult
Ard (73)	Orientation	Coequal
Gaoni & Neumann (74)	Teacher	Mutual Consult
Littrell et al (79)	Goal Setting	Self Supervising
Stoltenberg (81)	Teacher	Sharing

This sequential nature of learning and development is well documented. Hersey & Blanchard (1988) review this literature and articulate the changing supervisor role relative to the supervisee's phasic progression in any situation where contextual variables are in effect. Their design, entitled "situational leadership" is particularly relevant to counselor training where supervision tends to be conducted in groups.

While agreeing broadly about the type and sequence of interventions a supervisor might employ, supervision theorists remain in disagreement about how to portray the domain of knowledge represented by counselling practice, how to articulate the various skill domains that might collectively make up the knowledge domain of counselling practice, how to define the passage taken by supervisees

through these domains and how to conceptualize supervisor interventions relative to skill domains.

In the earliest supervision literature, supervision was described within particular theoretical schools such as Psychoanalysis or Behaviorism. In later writings supervision was represented within limited skill domains, such as emotional development or skills training. THese were representative of broad theoretical trends in counselling theory. Early developmental supervision theorists articulated stage sequences whose language suggested a concentration on limited experiential domains without a specific articulation of skill domains.

For example, Hogan (1974), in focusing upon dependency issues, effectively ignores the problem of skill domains. He articulates four stages of counselor development: 1) Dependency on Supervisor, 2) Dependency Autonomy Conflict, 3) Conditional Dependency and 4) Master Psychologist. He also describes four matching supervisor environments: 1) Tuition, 2) Support, 3) Sharing as Peers and 4) Sharing/Mutual Consultation. He thus identifies the passage to counselling mastery as the ability to resolve these experiential issues and effectively bypasses a definition of skill domains necessary for counseling effectiveness.

In this manner, supervisory models have had difficulty adequately representing the totality of the skills existing within the domain of counselling practice. By defining their models within stage concepts, using language that

ignores the problem of skill domains and/or concentrating narrowly upon particular experiential domains, they appear ambivalent about the complexity of the counseling process.

This complexity is evident in research on the effectiveness of counselling. It indicates that quite a broad range of skills and theoretical approaches are successful providing success is measured within the definition of the theory's goals (Bergin & Lampert, 1978; Brown, 1987). The variance in skills essential to psychoanalytic, behavioral, client centered and rational emotive theories is illustrative of how broad the domain of knowledge represented by counseling practice might be, and within this domain, what tremendous variance may exist in the contextual demand for particular skills.

This essential problem is recognized and confronted by later developmental models. These models, such as Stoltenberg (1981), attempt to incorporate a wider variety of skill domains within their stages. However, held within rigidly defined stage dynamics, they do not easily allow for individual variance or the exploration of situational constraints. Though they expand the skill domains in consideration, their stage nature dictates the supervisor's perception of the supervisee. Thus they are more likely to be gender and culture bound.

Such stage defined models create the illusion that all persons from all cultures approach the task of counselling from the same perspective and rigidly advance through

identical stages of skill acquisition. It seems more likely that a concentration upon the emotional development of the supervisee may violate the conventions of some cultural groups, while a model concentrating upon the acquisition of skills may ignore the development necessary in the affective arena that is necessary for other cultural groups.

The most recent developmental models, the primary concern of this paper, reference theories of adult development as the foundation upon which their work is built. This focus suggests that the primary task of supervision is to advance the cognitive development of the supervisee in the direction of increased cognitive complexity. This change in focus places emphasis upon enhancing the counselor's ability to comprehend the nature of the counselling process as it evolves, without constraining this understanding within the limits of specific technologies, theories or skill domains.

These models move to broaden the considerations applicable to development within the domain of counselling and move towards encompassing the entire domain of counselling practice. Unfortunately, as Holloway (1987, 1988) points out, this link to developmental theory is tenuous at best and certainly arguable.

While these models use the language of adult development, it is questionable whether the referenced theories are actually respected. Not only is their use of stage concepts seriously in question, many other possible

explanations for the development they describe are possible. One explanation, with simplicity to its credit, being that the development depicted is actually a description of the phase associated relational phenomena of student/faculty interaction with its attendant power differential. Thus, while broadening the concept of what is being developed, these models appear unwilling, and perhaps unable, to adequately explain their link to cognitive developmental theory.

3. Relationship to Development

As previously discussed, difficulties arise when appraising how developmental supervision models deal with the large domain of knowledge represented by counselling practice. Early models concentrated upon limited experiential domains articulated within stage concepts. Later models were more likely to specify the skill domains contained within the experiential domains and structure "stage" development relevant to them.

An intriguing incorporative tendency is evident as the field of supervision matures. Later models subsume the ideas of earlier models within more comprehensive conceptualizations of supervisee development. This incorporative trend parallels the evolution of supervision literature predating developmental supervision.

Initially, supervision was limited to the theory of psychotherapy that spawned it. Supervision then became specific to general skill domains derived from theories of

psychotherapy. Skill domain models were then integrated into more incorporative models. For example, the client centered facilitator model (Truax and Carkhuff, 1967; Selfridge, 1975), the skills training model (Ivey, 1968) and behavioral models (Horan, 1972) were blended together by Kell and Burrow (1970) to form one hybrid model that incorporated the principles defined in the models that preceded its development (Stoltenberg & Delworth, 1987). Thus, as the field matured, a blending of theories occurred that allowed the conception of supervision to change (Leddick & Bernard, 1980).

Theories of developmental supervision offered a more complex understanding of skill domains already referenced in earlier supervision literature by adding the concept that learning took place within a developmental progression. They concentrated upon the impact of the changing context of the supervision environment. Later developmental supervision theories again performed an incorporative function by absorbing several earlier models within broader more complex conceptualizations such as the incorporation of phasic progressions within stage designs. In this way they evolved towards more general descriptors of psychosocial development within counselling supervision (Holloway, 1987).

The development of supervision theory, in its stage like movement towards more complex conceptualizations, parallels the developmental structure posited in theories of adult cognitive development. This is demonstrated by the

generation of successive stages of model building where the structure of the models proposed is increasingly more complex and incorporative of earlier designs (see Commons, 1990; Erdynast, 1990; Perry, 1970).

Most research concerning developmental supervision is unrelated to adult cognitive development. Usually supervisory relationships are studied, often within whatever domain of development is considered relevant to a particular theory. Such research recruits the opinions of those involved in the supervision process as opposed to examining the actual supervision process (Holloway, 1987). Trainees give their perceptions of self, supervisor and supervision (see Heppner & Rhoelke, 1984; Reising & Danials, 1983; Worthington, 1984). Supervisors give their perceptions of supervisee, self and supervision (see Wiley & Ray, 1986, Miars et al., 1983). For instance, Reising and Daniels (1983), when testing Hogan's (1964) model, found that the self descriptions of beginning counselors suggested they were more anxious, dependent and desirous of technique oriented supervision than did the self descriptions of more advanced supervisees.

The formal link between counselor development and adult cognitive developmental theory has only recently attracted the attention of supervision researchers. Results suggest that a correlation exists between various measures of ego development and counseling ability. Both Carlozzi, Gaa & Liberman (1983) and Benack (1988) describe a link between

ego development and increased empathy. Level of experience and ego development are linked by Hillerbrand (1989) and Borders (1989).

All in all, work in this area appears to be limited by the absence of a simple means to measure cognitive development within domains of counseling knowledge. Research suggests that a correlation exists between cognitive developmental level and counseling ability but the findings are generally significant only when the least and most experienced subjects are compared (Holloway, 1987).

The direct referencing of adult cognitive development and its incorporation within developmental supervision models appears to be yet another stage in the developmental complexity of supervision theory. In considering counselor development as the ability to conceptualize the same issues more complexly, a new structure is posited that may be capable of crossing all skill domains. Among the developmental supervision theorists, three models have been proposed in an attempt to wrestle with this problem.

Blocher (1983) first proposed that supervision be geared to the development of increasingly complex conceptualizations. Stoltenberg and Delworth, in 1987, attempted to articulate the skill domains represented by counselling practice and to integrate them within four levels of development expressed within stage constructs. Carey & Shaughnessy (1990) attempted to integrate adult cognitive development with Carey's Cognitive Developmental

Model (CDM). They described a specific cognitive development continuum within a stage concept and applied it to two broad domains describing essential elements of counselling practice.

In summary, developmental models of supervision are still in their infancy and subject to numerous areas of criticism including: (1) the assumptions they make regarding the supervisory process, (2) the nature of their focus upon the supervision process and (3) how they conceptualize the developmental process within supervision. The remainder of this paper examines three models of supervision that more closely ally themselves with adult cognitive development. These more specific examples should serve to illustrate the aforementioned points and document recent changes in the field. They include Blocher (1983), Stoltenberg and Delworth (1987) and Carey and Shaughnessy (1990).

C. Blocher (1983)

1. Introduction

Blocher's model of cognitive developmental supervision explicitly focuses upon facilitating the supervisee's ability to generate more complex conceptualizations of the counselling process. The cognitive development that is referenced is not explicitly tied to any particular adult cognitive scheme, but since theorists are referenced who unanimously endorse stage concepts, we must assume that Blocher perceives this development as stage based.

Within this general mandate of building cognitive complexity, Blocher asserts that a communication environment must exist that will facilitate this purpose and within this environment he notes seven essential dynamics affecting the interaction of learner and environment (see Table 1.4).

Table 1.4

Blocher's 1983 Supervision Model

Communication Environment	Essential Dynamics
Mutual Trust	Challenge
Respect	Involvement
Concern	Support
	Structure
	Feedback
	Innovation
	Integration

2. Assumptions

Blocher refers to his theory as constructivist in its concern for how the supervisee filters and categorizes information through the use of cognitive structures such as schemas, and his belief that we are all active information processors. In broad terms it instructs the supervisor to focus upon the counselor's ability to perceive others in terms of "greater complexity, decreased stereotypy, and greater ability to integrate discordant or inconsistent information about the behavior of others."

As with the vast majority of supervision models, this model focuses mainly upon what the supervisor "expert" should do in order to enhance the progress of the supervisee

"trainee". In doing so it creates a picture that contrasts with Blocher's attractive characterization of his model as constructivist. Though Blocher accepts that individual supervisor's can be damaging, he indirectly assumes competency in supervisors and counsels it is correct to implement the model from an "expert" perspective. In contrast, the supervisee is assumed to require development of cognitive complexity without reference to any specific domains, previous counseling experience or previous supervision. Thus "constructivist" is used as a simple descriptor implying information processing as opposed to any suggestion, a la Anderson (1988) or Hoffman (1985), that a coequal processing may be desirable.

This stance may be due to the conceptual limitations placed upon supervision research by the assumption it involves the supervision of students in academic settings. As previously discussed, such a perspective creates a series of blind spots that limit the fields ability to adequately conceptualize the full breadth of supervision. In developmental terms, it is like studying adult behavior through the examination of high school students in a laboratory setting. The naturally occurring behavior one wishes to study is confounded by the contextual influences and the essential difference in level of experience.

Blocher believes that supervisor's should expand the cognitive complexity with which supervisees view counselling and maintain a developmental learning environment relative

to this basic goal. However, he fails to describe how that process actually takes place. There is no clear delineation of cognitive complexity in relationship to axis such as time. Theorists are noted, most specifically Piaget & Inhelder (1969), Loevinger (1976), Kohlberg (1969) and Perry (1970), but no specific reference is made to the cognitive developmental concepts they might represent such as stage, criterion for inclusion within stages, and criterion for movement from stage to stage.

While Blocher assumes supervisor effectiveness is directly related to the ability to increase the supervisees' complexity of conceptualization, he makes no reference to how the supervisor might become effective at this process. He acknowledges that supervisors vary in their ability and notes that they may damage, rather than aid, the supervisee. However, he proposes no means of assessing or training supervisors. This is particularly unfortunate since his schedule of demands for supervisors (see Table 1.4) is rigorous and suggests supervisors must be very highly developed specimens with a near infinite capacity to generate more complex conceptualizations.

3. Focus

Blocher refers to his theory as constructivist in its concern for how the supervisee categorizes information through the use of cognitive structures such as schemas. In broad terms it instructs the supervisor to focus upon the counselor's ability to acquire "more complex and

comprehensive schemas for understanding human interaction" (Blocher, 1983). This orientation, though innovative and the essence of adult cognitive development, is not elaborated upon in any systematic manner.

Blocher does not articulate his theory in relationship to stages, phases, or as an organized development relevant strategy. The goal of fostering increased cognitive complexity is not supported by any structural component or any organized strategy of application that prospective users might adapt. In describing process goals of respect, trust and honesty, and enumerating seven environmental features that must be controlled in order to insure the excellence of the supervision, he characterizes the goals, intentions and activity of supervision without defining how supervision might actually work.

4.Development

Blocher (1983) presents a view of supervision notable for its specific reference to human cognitive development, psychologies of learning and behavior change. These references, and his articulation of theory, anchor him in the notion that the primary value of supervision is its ability to aid the supervisee in the development of higher order themes to "help organize complex sets of information coming from a variety of sources" (Blocher 1983).

Though Blocher clearly locates his theory within the concept of cognitive complexity, he does not specify the stages a supervisee or supervisor should attend to, nor does

he specifically identify how the supervisor should approach the task of encouraging increased cognitive complexity. He discusses a series of dynamics and suggests these are essential for effective learning and should be maintained within supervision practice.

Blocher makes no distinction among skill domains. This, combined with his choice of adult development references, suggests that he believes the development evidenced in supervision is lifespan development as opposed to development within specific or general domains of knowledge. It thus seems likely that Blocher holds the supervisor responsible for furthering the overall lifespan development of the supervisee and expects to witness these changes within the domain of counselling knowledge and practice.

In a later article (Blocher, Christensen, Hale-Fiske, Neren, Spencer & Fowlkes, 1985) Blocher introduces a preliminary attempt to measure cognitive growth. This study helps to define areas of thought that were ambiguous in the original article. He attempts to separate overall cognitive development from the development of complexity in the area of person perception. Specifically, he investigates the development of increased cognitive complexity within domains of counselling process such as non-verbal communication and the integration of separate conceptualizations.

D. Stoltenberg and Delworth (1987)

1. Introduction

Stoltenberg and Delworth integrate a phase structure drawn from the work of Loganbill, Hardy & Delworth (1982) within a stage model drawn from Hogan (1964) and Stoltenberg (1981). They articulate four levels of supervisee development. These levels (see Table 1.2) are represented as stages, and the final level is represented as the ability to integrate the previous three stages.

Within these four levels, three overriding structures, Self and Other Awareness, Motivation, and Autonomy, are re-experienced at each level within the demands of eight skill domains. Though each of the three structures is present at each level, Stoltenberg and Delworth accentuate certain aspects of the structure at each level.

Within the structure of self and other awareness they assert that level one is primarily concerned with self, level two with client, level three with interaction and level four with all possibilities previously encountered; within the structure of Autonomy they assert that level one is primarily concerned with dependence, level two with dependency autonomy conflict, level three with greater autonomy, and level four with complete autonomy and the ability to consider equally each of the preceding levels.

Thus, the model suggests that an essential feature of the master counselor is the ability to access experience and skills from all levels of the articulated skill domains.

While not explicitly stated, this suggests that counselors, previous to having reached level three integrated, are stage bound and unable to conceptualize their experience from outside of their present level of development.

2. Assumptions

Holloway (1988) asks three major questions of this model and thereby illuminates key assumptions within it. First, are changes that are observed in trainees related to the supervision they receive or are other factors responsible? Stoltenberg and Delworth appear to assume that the developmental process they articulate is inherent to the process of becoming a competent counselor. In this light they suggest that supervision models should adapt themselves to this stable process.

They reference Hill, Charles, and Reed (1981), Reising and Daniels (1983) and Wiley and Ray (1986) as support for their assumption that supervisees progress through stages of development characterized by increased confidence and independence over time, and that previous counseling experience may have no effect upon the need to begin at stage one of this model. Holloway suggests that these assumptions seem much more likely to fit the explanation that supervisees are adapting to the relational tasks and power differentials accompanying their role as student trainees and as such must fit the relational model of their supervisors if they are to receive a reasonable grade.

In a related question Holloway asks whether conceptual level is being considered within a content specific or global context. She notes research by Holloway & Wampold (1986) who describe a correlation between conceptual level and performance on counseling related tasks. This suggests that conceptual level, considered as a global construct, is related to counselor performance regardless of any involvement in supervision or training. This contradicts Stoltenberg & Delworth's assumption that conceptual level be considered as a global construct that influences the speed with which levels are mastered but not the levels through which each counselor trainee must progress.

This assumption, when seen in the light of Holloway's critique, points out the differential that exists between the concepts of stage and phase. Stoltenberg and Delworth's model makes perfect sense when viewed as a phase model. As a phase model it describes with precision how a counselor trainee adapts to the counselling "culture" and articulates nicely the repetitive nature of coping with similar problems made different by varying contextual demands. When the model is limited by stage concepts, Holloway's criticism that conceptual level is a valid predictor of performance within particular skill domains and more generally across supervision environments gains credence.

Lastly, Holloway questions whether developmental models in general, and Stoltenberg and Delworth's in particular, are clear enough in their statements of premise, process and

expected result to allow for research to be conducted effectively. She further asserts that researchers in this area must be willing to keep the experimental questions and methods consistent with model constructs. With this in mind she repeats her comment of 1987, "It remains incumbent upon developmentalists to substantiate that a structural, qualitative and predictable change occurs as a result of training to be a counselor".

3. Focus

The focus of this model is comprehensive. Many criticisms previously made in the literature have been addressed including a chapter on applying the model to supervisors, and a chapter on ethical, legal, gender and culture issues. This broadening of the model beyond the original conception of Stoltenberg (1981) has not enhanced its utility. The point is made that accurate assessment is vital to its use. While credit must be given for the inclusion of assessment procedures as necessary steps in working with the developmental process of supervision, the advice to compile detailed histories and conduct pen and pencil tests as well as utilizing the model's own devices creates a cumbersome process.

The practical aspects of this model's approach to supervision is unwieldy. By integrating a phase approach within a stage model, it necessitates the consideration of 8 domains within 3 overriding factors among 4 sequential levels of development. At the initiation of any one

supervision, the supervisor may be forced to consider 96 possible combinations. This task is not significantly reduced as supervision proceeds, since it is acknowledged that levels may vary relative to specific domains. Assuming that the supervisee happens to achieve one consistent level for all domains, there remains a three by 8 matrix of possibilities for consideration. This defines the model as more appropriately suited to the task of guiding the reflection and planning of the supervisor between sessions as opposed to aiding the supervisor in sessions.

Unlike other models, this model addresses the subject of supervisor competence and training. In this model it is assumed that a supervisor cannot exceed their level of competence as a counselor. Thus a level one supervisor may be a level 3 Integrated counselor but a level 1 counselor cannot be a level 2 supervisor. This defines supervision process as different from counseling process, supervision skill domains as different from counselor skill domains and cognitive complexity as a function of skill domain not overall lifespan development.

Though it is noted that the domains necessary for effective supervision have not been established, the same model is suggested as appropriate to the development of the supervisor. By suggesting the model is suitable for both tasks while maintaining that the tasks are demonstrably different, Stoltenberg and Delworth verge towards defining the model as generally appropriate as a learning structure

for any knowledge domain providing the attendant skill domains are defined. This property is normally suggestive of phase vs stage constructs and is foreign to most conceptions of adult cognitive development.

The creation of a phase concept imbedded within a stage design, expressed in terms of dependency/autonomy conflicts, besides limiting the flexibility of this model, also necessitates that persons with a culture or gender oriented towards valued expressions of dependency may be viewed as trapped within lower levels of development for longer periods of time. This entrapment is made more likely due to the conceptualization of the supervisor as the expert working with inexpert trainees as supervisees.

4. Development

Stoltenberg and Delworth articulate three basic structural properties of supervisee development that must be considered at each of four levels of development (three levels, plus the third level integrated) across eight functional domains (see Table 1.2). They utilize the Piagetian concept of accommodation and assimilation to describe the behaviors of supervisor and supervisee at each level and refer to Loevinger (1976) in noting that movement through the levels, though irreversible, is gradual.

In any of the first three levels the supervisee may be concentrating on a variety of the eight skill domains. They may master some quickly and others more slowly but all must be mastered by a passage through the three overriding

structures of Self and Other Awareness, Motivation and Autonomy. Mastery of these three structures within all skill domains allows the supervisee to move on to the next level. A failure to accomplish mastery of a skill domain precludes movement to another level. The fourth level, articulated as level three integrated, represents the supervisees ability to conceptualize within the demands of all three previous levels as opposed to being locked within the conceptualizations of only one level.

It is inferred that the supervisor concentrates their energy on insuring that the 8 domains of counselor functioning are adequately addressed at each of the 4 levels of development by working through the three overriding structures. This reasonably prepares the supervisor for the general task of supervision but fails to offer suggestions for situational crisis as they occur.

As with most other developmental models, this model is presented as a stage model. In this case an attempt has been made to integrate a phase structure in the form of the repeated overriding structures and related skill domains. However, the unidirectionality of the model clearly demarcates it as a stage concept. Levels are irreversibly attained and skill domains are irreversibly mastered.

The model describes the movement of the supervisee through professional development within skill domains as opposed to cognitive development within the same domains. It is true that the levels described each represent more

cognitively complex treatments of the 8 skill domains and thereby remain consistent with the premise of Stoltenberg's (1981) Counselor Complexity Model, however, they are not conceptualized as being the same as adult cognitive stages.

Cognitive developmental theorists are referenced more to describe the nature of developmental movement through stages of any type than to bolster any argument that these stages represent cognitive developmental levels. In fact, the authors point out that one's progression thorough the model's levels is to some extant separately dependent upon cognitive and ego development. This appears to confirm that cognitive development is actually a structure separate from their model.

E. Carey and Shaughnessy (1990)

1. Introduction

As shown in Table 1.5, Carey and Shaughnessy articulate a model that has a strict cognitive developmental focus that is applied within two essential domains of counselling practice, modality and focus.

The primary attribute of this model is its ability to locate cognitive developmental level with reference to two essential skill domains. This allows the supervisor to focus his/her language with reference to the capabilities of the supervisee relative to cognitive developmental level within these domains of counselling skill.

Table 1.5

Cognitive Developmental Model

Cog Dev Level	Modality	Focus
1. Elemental	1. Affect	1. Client
2. Concrete	2. Behavior	2. Client/Counselor Interaction
3. Formal	3. Cognition	3. Counselor
4. Post-Formal		4. Counselor/Supervisor Interaction

2. Assumptions

Carey and Shaughnessy (1990) introduce a model that is explicitly designated the Cognitive Developmental Model (CDM) of supervision and note as its antecedent Blocher (1983). In it they reference developmental stage theorists, Piaget (1929) and Perry (1970), as developed and interpreted by Weinstein & Alschuler (1985) and Ivey (1987). They clearly articulate the model as a stage model.

The CDM explicitly states that developmental level must be viewed in relation to skill domains (Fischer (1980), focuses its attention upon the language of supervision and proposes two skill domains that are consistently present in supervision dialogue: modality and focus. Modality contains three categories: Affect, Behavior and Cognition while the Focus dimension contains four categories: Client, Client-Counselor Interaction, Counselor and Counselor-Supervisor Interaction. They contend that all statements made within the supervision forum can be identified for Modality and Focus dimensions within four stages of Cognitive Development.

This design represents a matrix of possibilities that enable the supervisor to adjust to the meaning inherent in the structure of the language being used. These adjustments can be made in the moment as well as being developed as strategies over the long term. Thus the model has both strategic and tactical potential which enables the supervisor to recognize the competency of the supervisee to utilize various aspects of focus and modality while also assessing the cognitive complexity with which this is accomplished. This expands upon previous supervision models that developed theories within the domains of specific categories of focus and modality.

For instance, within the domain of focus, Loganbill and Stoltenberg's (1983) Case Conceptualization Format focuses upon the client, Kagan's (1975) Interpersonal Process Recall emphasizes client-counselor dynamics, client centered models (Patterson, 1964) focus upon the counselor, and Mueller & Kell's (1972) Interpersonal Model and psychodynamic parallel process models (Doehrman, 1976) stress counselor-supervisor dynamics. In the domain of modality, models emphasizing counselor anxiety (see Mueller & Kell, 1972) focus upon affective experience, whereas models stressing conceptualization of client problems (Wessler & Ellis, 1980) stress cognition, and process skills acquisition models (Ivey & Authier, 1978) stress behavior.

The CDM assumes that developmental level and the domains of focus and modality can be validly estimated. It

suggests by its assumption of the "tactical" property that the assessment of these domains can adequately be performed during the supervision session. Lastly, it assumes that with a minimum of training, supervisors can perform these tasks reliably. These are not small assumptions. However, they are the sort of assumptions that all developmental models appear to make.

3. Focus

The focus of this model is explicitly tactical. This implies that it can be used within the context of the ongoing supervision environment as an aid to moment to moment interaction. To be successful at this task the supervisor must be able to assess the cognitive developmental level of the supervisee relative to the two domains of focus and modality.

While not directly stated, it is implied that developmental level will be a relatively static phenomena as applied to skill domains. Thus the supervisor can attempt to increase the supervisee's abilities across the dimensions of each domain within the constructs of one developmental level. Simultaneously the supervisor can test for the ability to relate in more or less complex constructs, thus prompting movement through developmental levels.

The model is described as tactical though it offers strategic possibilities. In citing Blocher (1983) as an antecedent, Carey and Shaughnessy clearly identify the supervisor's task as aiding the supervisee in the

development of more complex ways of viewing the counseling process. The matrix structure of the model provides a framework by which the supervisor and supervisee can assess their abilities relative to domains and cognitive developmental level.

As with many other models, this model does not focus upon how one becomes a supervisor. It can be inferred that the creation of competent supervisors is considered to be a process of increasing the cognitive complexity of the supervisor thus multiplying the perspectives from which they are capable of viewing any particular problem. It is axiomatic that supervisors functioning at lower cognitive developmental levels and/or without the ability to access all categories within the two domains represented, would be unable to provide adequate supervision. Thus, mastery of the dynamics of the model itself is considered to be the necessary learning that must occur. This training is articulated in a training manual that is in the process of being tested.

A benefit of this model's structure and focus, is its relative freedom from biases of culture, gender and age. This model does not require everyone to begin at a particular level and progress in a unidirectional manner though the domain of counselling knowledge. This model accepts the counselor wherever they are found and attempts to broaden their capacities within domains essential to counselling practice. This work is accomplished within the

cognitive abilities of the supervisee while allowing for their cognitive capacity to be developed in the direction of increased complexity.

4. Development

Relative to other models, the CDM is distinct in its emphasis upon cognitive developmental level within specific domains as a primary construct. In taking this stance the CDM defines the parameters of the theory relative to acknowledged constructs of adult development. Adult cognitive theory is clearly referenced and stage concepts are accepted within the limits of particular domains.

By applying cognitive development strictly within the two referenced domains of modality and focus the CDM defines cognitive development as domain specific. This recognizes the suggestion of Erdynast (1990) that attention be turned away from the development of new models of cognitive development and towards the enumeration of domains that require distinct visions of cognitive developmental process.

The distinct nature of the CDM creates clear parameters for researchers to establish whether or not cognitive complexity is related to specific domains or exists simply as a more general construct. Once the CDM is adequately tested, research can hinge upon these simply described developmental constructs, their relationship to the domains articulated within the model and other as yet unnamed domains relative to counselor competence.

F. Summary

In summary, the development of supervision theory has paralleled the essential construct of adult cognitive development while steadily advancing our understanding of supervision process. New generations of models tend to incorporate the essence of preceding generations of models within more complex and inclusive theories. The present generation of model building appears concerned with the creation of supervision models that accurately reflect cognitive developmental concepts within functional skill domains that are essential to counselling success.

CHAPTER II

THREE STUDIES

A. Introduction

Supervision research is in its infancy. This is illustrated by the frequency with which new theories are proposed and the infrequency with which attempts are made to establish the validity of these theories. Within this fecund atmosphere of model building, developmental models of supervision have gained an ascendancy to the point where Holloway (1987) refers to them as "the zeitgeist of supervision thinking and research" and Worthington (1987) notes 17 different supervision theories that fall within the developmental rubric.

Developmental supervision theories differ from the theories that precede them in three essential ways: (1) they assume that supervision is essentially different from counseling, (2) they assume that supervisees pass through more or less definable stages as they develop into skilled practitioners and (3) they assume that as the supervisee develops, the supervision environment must also be transformed in order to remain responsive to the changing needs of the developing supervisee.

In constructing models of supervision that integrate these assumptions, most theorists have borrowed the language of adult cognitive development in an effort to describe the progression of the supervisee through the supervision experience, and the necessity of constructing supervision

environments to match the development of the supervisee. These theories tend to identify the stage, the supervisee role, and the environment the supervisor should construct, relative to stage and supervisee role, in order to achieve maximum effectiveness.

In utilizing stage concepts, developmental supervision theorists appear to suggest that the rules governing these concepts in adult cognitive developmental theory also apply in developmental supervision theory. This implies that stages are distinct one from another, movement between the stages is unidirectional, movement between the stages is irreversible and the development described at each stage crosses all domains of counselling knowledge and experience. Thus the supervisee moves steadily onward and upward until the final stage, often conceptualized as "master counselor" and often implied to occur by the end of training.

Most theories do not reference adult cognitive developmental theory directly, and those that do, avoid positing any direct link to these theories (Holloway, 1987). Thus we are left to conjecture what is meant by the use of language derived from adult cognitive developmental literature and to puzzle out how closely allied these theories are to the premises of adult cognitive development as articulated by referenced theorists such as Loevinger (1976) and Perry (1970).

It is common for developmental supervision theories to describe functional aspects of development, such as what

issue is relevant to the counselor at what time. As such they are actually describing a phasic progression through experiential domains. These sometimes splendid descriptions of the skills necessary for effectiveness within the counseling and supervisory environment are usually compromised by their entrapment within stage concepts.

In the earliest supervision literature, supervision is described within the limitations of particular theoretical schools and their skill requirements such as Psychoanalysis and Behaviorism. In later writings, supervision is discussed within the framework of particular skill domains, such as emotional development or skills training, each representative of broad theoretical traditions. The advent of developmental supervision brought attention to the changes the supervisee experienced over the course of training and how supervision style and content must adapt to these variations.

Early developmental theories expressed these variations within experiential domains that were assumed to integrate necessary skill domains within them but whose language tended to limit the inclusiveness of the domains in question. For example, Hogan (1974) focuses on dependency issues, utilizing the "stages" of Dependency on Supervisor, Dependency Autonomy Conflict, Conditional Dependency and Master Psychologist as his "stages". While these "stages" reveal much about the nature of the progression from beginning counselor to master counselor, they do not

exhaustively describe it nor do they reveal the skills necessary to accomplish this goal. Later developmental theorists, such as Stoltenberg (1981), make a concentrated effort to articulate skill domains and include them within their theoretical structure.

Developmental supervision models have had difficulty adequately representing the totality of the skills existing within the domain of counselling practice. By defining models within stage concepts that often ignore the problem of skill domains, at other times broadly reference them and lately enumerate them, they appear ambivalent about the complexity of the counseling process and confused about how to describe it. Critics have questioned the seriousness of the link to adult cognitive development and the inability to demonstrate stage designs that are adequate descriptors for supervision process.

Of late, efforts have been made to explicitly reference adult cognitive developmental theory and build models of the supervision and counselling that hinge upon the capacity of the counselor to reference counselling process within more complex conceptualizations. Several recent works have struggled with this problem.

Blocher (1983) first articulates this distinction by stipulating the development of increasingly complex understandings of counseling practice as the goal of supervision. Stoltenberg and Delworth (1987), in generating a somewhat intricate scheme of multiple stage, multiple

phase and multiple domain development, articulate how their theory borrows from and is different from cognitive developmental theory. Lastly, Carey and Shaughnessy's (1989) description of the Cognitive Developmental Model (CDM) of supervision explicitly describes four levels of cognitive complexity within two extensive domains of counselor knowledge.

The three studies described in this paper emerge from the context of work in progress on the CDM. They are motivated by the broad question of how adult lifespan cognitive development can be adequately conceptualized within developmental supervision theory. They are directed towards investigating the validity and reliability of concepts associated with the CDM.

The CDM proposes that supervision language contains: (1) one of four cognitive developmental levels (Elemental, Concrete, Formal or Postformal), (2) One of three learning modalities (Affect, Behavior or Cognition), and (3) one of four targets of language (Client, Client-Counselor Interaction, Counselor or Counselor-Supervisor Interaction). It describes the supervisees' progression through four sequential and hierarchically ordered levels of development in cognitive domains related to counseling performance. The model also indicates how supervision language reflects the cognitive development of supervisees and suggests how supervision can he adapted to cognitive levels. The three

studies investigate different aspects of this model using Q-Sort methodology.

The first study investigates whether the dimensions of the CDM (Cognitive Developmental Level, Focus and Modality) can be found within supervision dialogue. The second study investigates the relationship of conceptual level and experience. The third study pilots the work necessary to establish the CDM as a system with high inter-rater reliability.

B. Study One

1. Introduction

Do counselors untrained in the CDM model spontaneously recognize any of the dimensions that compose the model (Focus, Modality and/or Cognitive Developmental level)? If so, it can be hypothesized that the dimensions recognized exist in supervision language and are recognized as important within the context of supervision.

The CDM dimensions of Cognitive Development, Modality and Focus encompass a broad spectrum of counselling knowledge and theoretical development within a relatively simple configuration. By reducing the number of elements under consideration while expanding their range of application, it becomes possible to construct a supervision tool with maximum utility that includes cognitive developmental level. This allows the supervisor to locate the supervisee within a matrix composed of these possibilities (see Figure 2.1).

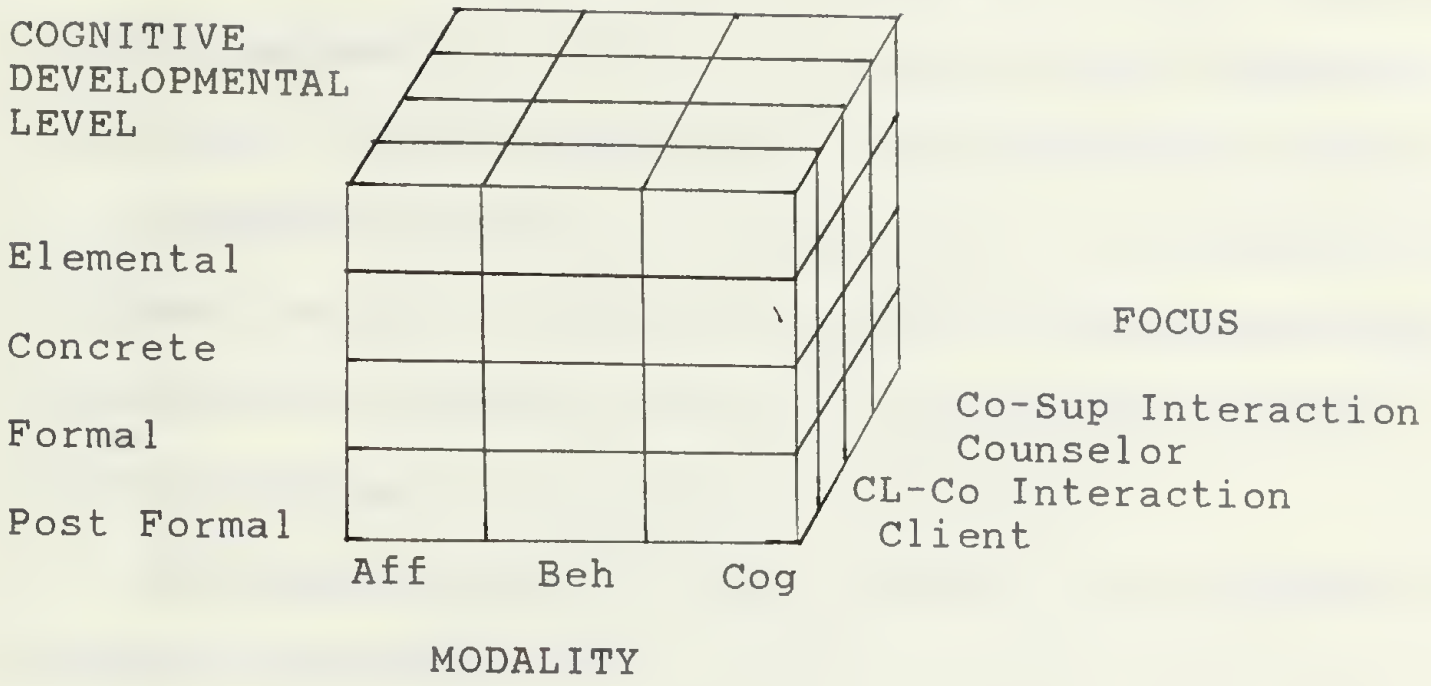


Figure 2.1
CDM's Three Dimensional Matrix

The CDM shares Blocher's (1983) premise that supervision's purpose is to help trainees develop more complex and comprehensive understandings of counseling process but differs in assuming that: (1) four distinct, sequential, and hierarchical stages of complexity adequately explain supervisee's developmentally related progressions of understanding, (2) learning domains of supervision extend beyond the counselors' understanding of human interaction into the domains of self understanding and client conceptualization and (3) cognitive developmental level must be measured in reference to a specific learning domain (see Fischer, 1980).

In line with Weinstein & Alschuler's (1985) Self Knowledge Theory and Ivey's (1987) Developmental Therapy, all statements are classified as being focused on one of four levels of cognitive complexity: (1) Elemental, (2)

Concrete, (3) Formal and (4) Postformal. These stages are roughly analogous to Piagetian Sensory-Motor, Concrete Operational, Formal Operational and Post Formal stages.

Elemental questions of supervisors are intended to help trainees identify, label and organize sensory-based data. Responses are characterized by sensory based language lacking reference to sequence or pattern.

Concrete questions reflect probes for a sequence of events or responses that include a sequence but not generalized patterns. Responses often have a "story" quality told from the counselor's perspective with few abstractions.

Formal questions are intended to help trainees identify patterns and generate logical rules. Responses reflect linear thinking and the identification of internal patterns. Often, these formal responses contain descriptions from a "third person" perspective. For example, "I tried to reassure him but he interpreted it as my lack of confidence in his ability".

Postformal questions and responses are heterogeneous due to the variety and types of thinking that make up this category. Supervisor questions attempt to help trainees transcend linear logic, see, understand and use postformal thinking in counseling. This includes: (1) reflection from multiple perspectives, (2) dialogic analysis of counseling behavior, (3) use of dialectic thinking and (4) use of systemic analysis. Responses are distinguished by the

blurring of the sharp formal operational distinction between objectivity and subjectivity, an understanding of the dialectics of interpersonal relationships as evidenced by an awareness of one's dual role as influencer and influence, an appreciation of the metaphorical nature of counseling theories, and an ability to take multiple perspectives on one's own work.

The dimension of Modality refers to the general learning mode on which supervisor's questions and statements are focused. Supervisor questions represent one of three categories: (1) Affect, (2) Behavior or (3) Cognition. There is an advantage to keeping these interrelated categories conceptually distinct. First, language is such that it is hard to be clear and focus on more than one of these dimensions at the same time. Second, theoretical approaches to counselling and supervision cluster on these three foci.

Consider differences and possible restrictions in modality that would result from a model based emphasis on counselor anxiety (see Mueller & Kell, 1972) vs. a model based emphasis on conceptualization of client problems (see Wessler & Ellis, 1980) vs. an emphasis on process skills acquisition (Ivey & Authier, 1978). Each of these models emphasize one dimension of modality and may thereby limit the scope of supervision dialogue.

The dimension of Focus refers to the person relationship mode on which statements are targeted.

Statements are targeted on one of four foci: (1) Client, (2) Client-Counselor dynamics, (3) Counselor or (4) Counselor-Supervisor dynamics. Client focus statements are targeted upon developing trainees' client conceptualization abilities. Client-Counselor dynamics statements are targeted at clarification of transactions, interactions or relationships. Counselor focus statements are targeted at trainees self knowledge development. Counselor-Supervisor dynamics statements are targeted at the clarification of transactions or the relationship between counselor and supervisor.

This dimension was developed through a conceptual analysis of how different supervision models would be manifested in the moment to moment process of supervision interaction. For example Loganbill & Stoltenberg's (1983) case conceptualization approach dictates that a primary focus be on the client. Kagan's (1975) Interpersonal Process Recall Model emphasizes a focus on client-counselor dynamics. Models based upon client centered approaches (Patterson, 1964) emphasize a focus on the counselor. Mueller & Kell's (1972) Interpersonal Model and models based on psychodynamic parallel process (Doehrman, 1976) emphasize a focus on the counselor-supervisor dynamics.

In Summary, the CDM includes three learning domains in the Focus dimension: understanding self (Counselor), other (Client) and interpersonal relationships (Counselor/Client and Counselor/Supervisor), three learning domains in the

Modality dimension: Affect, Behavior and Cognition, and refers to both of these dimensions within four levels of cognitive development: Elemental, Concrete, Formal and Postformal. This study attempts to establish the validity of one or more of these domains by subjecting minimal pieces of supervision dialogue to an open Q-Sort procedure in the hope that sorts would reveal one or more of these dimensions as spontaneous choice of a majority of counselors.

2. Method

Four groups of subjects, representing a broad range of counseling experience, categorized a standard set of items representing "pieces" of supervision dialogue in the form of forty eight question and answer sequences, the Q-Sort deck. Similarity matrices were constructed from these sorts and analyzed using Multidimensional Scaling and Cluster Analysis (see Kachigan, 1986).

3. Item Development

Forty eight items were included in the Q deck. These were either selected from previously recorded supervision transcripts or written by the experimenters using the recorded supervision dialogue as models. To insure comprehensiveness, items were selected or written so as to represent each cell of the 4 x 4 x 3 CDM. Each item was meticulously examined to insure that it was consistent throughout. Each item was compared with all other items to insure that the dimensions were clearly represented as intended and no ambiguities existed between items.

Each item was composed as a question and answer sequence with the supervisor asking the question and the supervisee responding (see Appendix A). In all cases the elements of the CDM represented by both question and answer were identical. Thus if the question was composed of a concrete developmental level, client focus and behavior modality, the answer is also composed of these elements.

These items were printed on similar orange cards approximately 1.5" x 3.5" in dimension. Random numbers were printed on the back of each card to insure accurate identification by the experimenters (see Appendix A).

4. Subject Selection

Subjects were selected to maximize diversity in levels of professional experience. Forty six subjects were included. Subjects were either Masters students from the University of Massachusetts enrolled in a counselling practicum course (12), Doctoral students from the University of Massachusetts enrolled in a supervision seminar (10), Faculty Members in counselor training programs from throughout the Western United States (16) and Supervisor-Counselors from the Boston area with a minimum of five years supervision experience (8). Gender balance was not achieved. Roughly 60% of the subjects were male.

5. Procedure

An open card sorting procedure was used. Subjects were instructed to sort the cards into groups such that all the cards in any one group were similar to the other cards in

that group in some important way, and different from the cards in the other groups. Subjects were asked to name each group based upon the characteristics that identified the cards in that group. No restrictions were placed upon the number of items per group or the number of groups per sort.

The results of these sorts were analyzed for all 46 subjects as one group, and for each of the four subgroups of Masters, Doctoral, Faculty and Supervisor-Counselor. Similarity matrices were computed and frequencies of co-occurrence were determined for all pairs of items. These frequencies ranged between 0 (never sorted together) to 46 for all subjects and 0 (never sorted together) to 10, 16, 8 & 12 (sorted together by all subjects) for each of the sub-groups respectively. These frequencies were rescaled to squared euclidian distance measures of proximity. The results were then subjected to Cluster Analysis and Multidimensional Scaling.

6. Results

a. Cluster Analysis

Matrices were subjected to Cluster Analysis using complete linkage to obtain an overall description of how the group as a whole, and each subgroup, categorized items according to the formula for Squared Euclidean distances (see Norusis, 1985).

In the group composed of all subjects (46), five main groupings were evident (see Figure 2.2). These main groupings showed a good correspondence to the Focus and

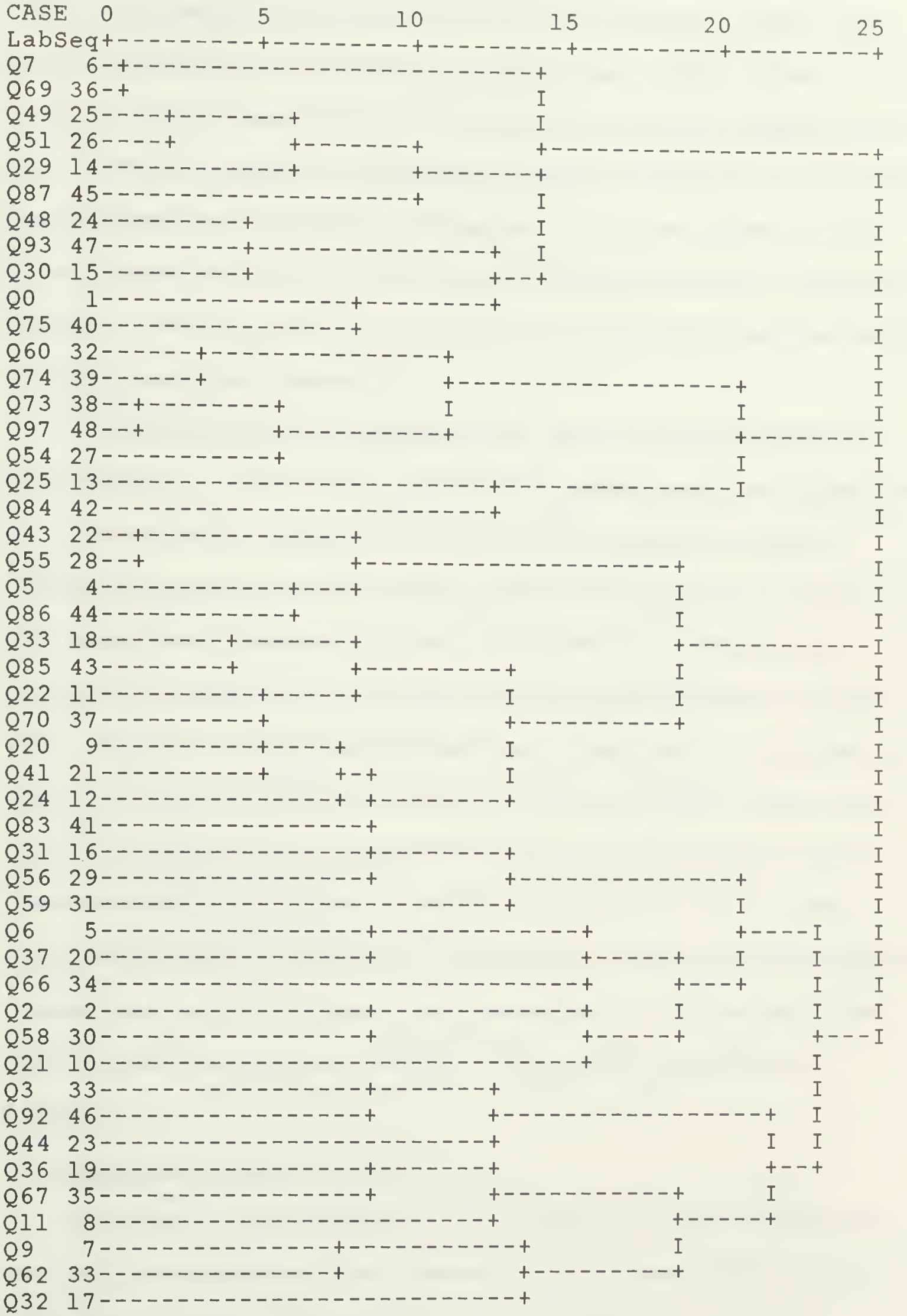


Figure 2.2

46 Subject Cluster Analysis

Modality dimensions of the CDM. All 11 items of the first major grouping were focused on the Client. All seven of the items in the second major grouping were focused upon Affect. All 12 of the items in the third major grouping were focused upon Counselor-Supervisor Dynamics. All ten items of the fourth grouping were focused upon Client-Counselor dynamics. Finally, seven of the nine items in the fifth grouping were focused upon the Counselor.

Cluster Analysis performed on each of the subgroups also showed a clear focus upon CDM dimensions (see Appendix B). The Cluster Analysis of the three subject groups representing more experienced counselors (Doctoral, Faculty and Supervisor-Counselors) each divided into four major groups of items that reflected the Focus Dimension of the CDM. The less experienced Masters group had five groupings, three of which reflected Modality, one of which reflected Counselor-Supervisor dynamics and one of which was mixed (see Appendix B). Thus, overall, Subjects sorted items consistent with dimensions of the CDM, with more experienced counselors sorting along the dimensions of Focus and less experienced counselors sorting along the dimensions of Modality.

b. Multidimensional Scaling

Matrices were subjected to nonmetric Multidimensional Scaling to determine the dimensionality underlying sorting. Once again these procedures were performed for all 46 subjects taken as one group (see Figure 2.3) and for each of

the four subject sub-groups: Masters (12), Doctoral (10), Faculty (16) and Supervisor-Counselors (8) (see Appendix C). In each case, iterations were S-stressed (Young, 1975) until improvements were less than .001. A two dimensional solution adequately fit the data and was easily interpretable.

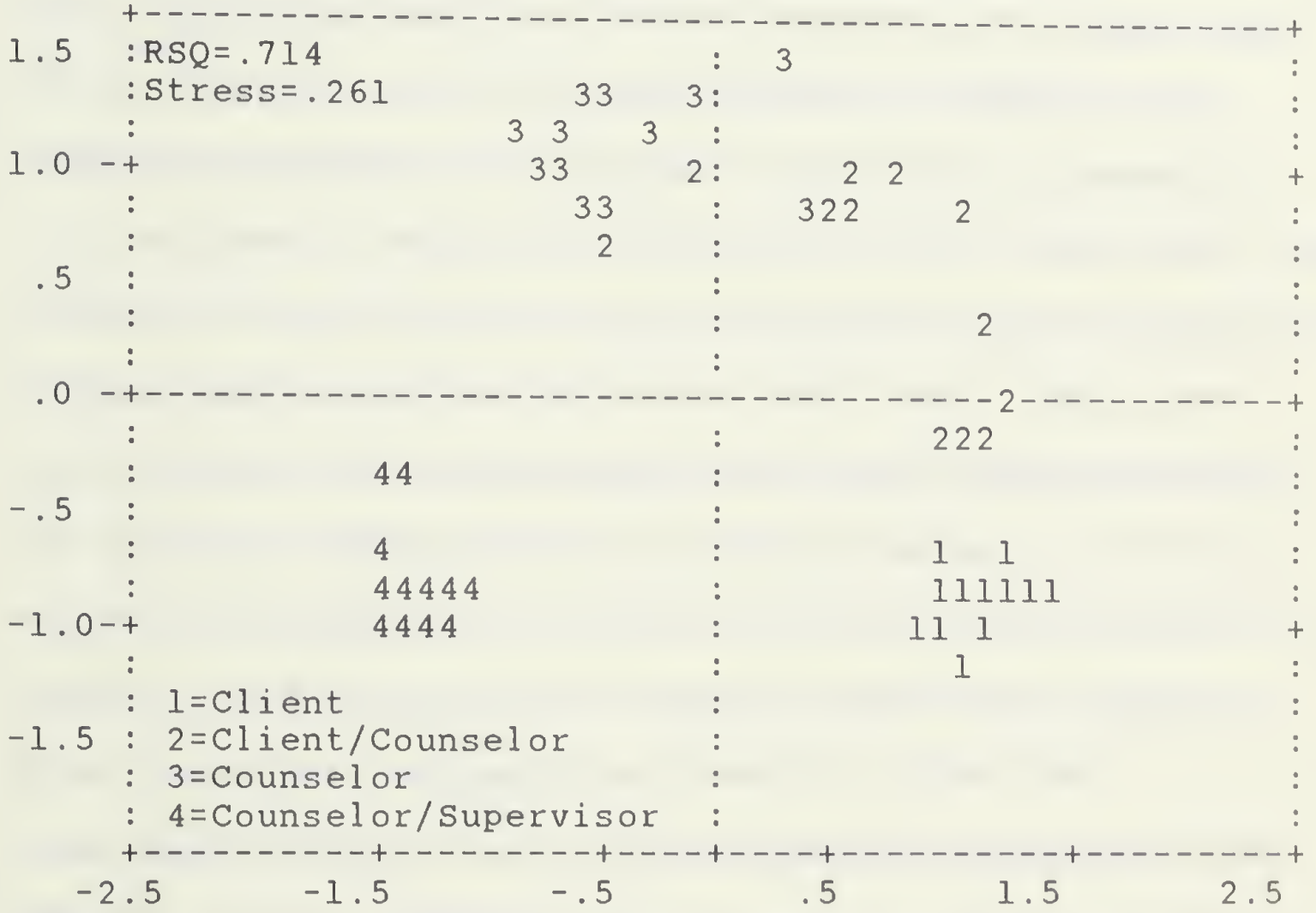


Figure 2.3

46 Subject Multidimensional Scaling

In the case of the 46 subject sort, over seventy percent of the variance in the scaled data was accounted for by their corresponding distances (RSQ=.714). A good fit between these observed dimensions and the Focus dimension of the CDM were observed. Focus upon Counselor-Supervisor

Dynamics and Client were particularly well defined, while Client/Counselor dynamics and Counselor focus, though distinctly grouped, shared a common boundary.

In the case of Doctoral and Faculty sorts, over seventy five percent of the variance in the scaled data was accounted for by their corresponding distances (RSQ=.758, .787). As in the overall sort, both Doctoral and Faculty sorts showed well defined Counselor-Supervisor dynamic and Client groupings, while Client-Counselor dynamics and Counselor groupings were distinct but shared a boundary.

In the case of Supervisor-Counselor sorts, over sixty four percent of the variance in the scaled data was accounted for by their corresponding distances (RSQ=.641). This sort clustered into three groupings with mixed characteristics. The first was characterized by the predominance of Client-Counselor dynamics, the second by Client focus and Behavior modality, and the third by Counselor-Supervisor dynamics, Affect modality and Cognitive Modality. Thus the Supervisor-Counselor sort, while demonstrating use of the CDM dimensions, showed increased variance when compared to Doctoral and Faculty sorts.

In the case of Masters sorts, over fifty percent of the variance in the scaled data was accounted for by their corresponding distances (RSQ=.522). This sort clustered into four groupings with mixed characteristics. The first was characterized by the predominance of Affect modality and Client focus, the second by Affect modality and mixed focus,

the third by Behavior and Cognitive modality, Counselor Focus and Counselor-Supervisor focus, and the last by Behavior and Cognitive modality and mixed focus. Thus the Masters sorts, while demonstrating use of the CDM dimensions, showed the greatest variance of all groups.

7. Discussion

These results confirmed that the Focus dimension, and to a lesser extent the Modality dimension, of the CDM was present in the samples and spontaneously identified by counselors representing a broad range of experience levels. This indicates that at least one dimension of the CDM, Focus, has adequate validity and another dimension of the CDM, Modality, is close behind.

It is of note that the Focus dimension was identified so clearly. This appears to demonstrate the level of importance attached to this particular dimension by counselors at all levels of experience and the ease with which they are capable of differentiating within it.

Modality was identified by the Masters group as a primary component of the Q-Deck. This suggests the possibility that the conceptualization of counselling at the masters level is an experience tied primarily to modality and to a lesser degree focus. The Supervisor-Counselor group made the next highest frequency of identification of the Modality dimension. This suggests the hypothesis that subjects with less and more experience of actual counselling and supervision (Masters and Supervisor-Counselor groups)

conceptualized in a qualitatively different way when compared to subjects more closely associated with academic perceptions of counselling and supervision (Doctoral and Faculty groups).

Caution must be used in interpreting these findings. It is the nature of sorting procedures and the construction of this particular Q-Deck that the selection of one variable in the CDM necessarily excluded the selection of the other two variables. Thus if one dimension of the CDM is chosen as the basis upon which to sort, due to the design of the deck, it is then impossible to simultaneously choose one of the other two. Likewise, a subject may sort the deck according to two variables simultaneously.

For instance, sorting cards into a pile that holds two dimensions such as "counselor focuses on client affect", will produce results with less definition. Open Q-Sort methodology is restricted to the statistical process of comparing which cards are grouped together, not the meaning of the labels supplied. In Study II, this subject will be treated in more depth including an analysis of labels compared and contrasted with the results of Cluster and Multidimensional Scaling analysis.

C. Study Two

1. Introduction

Does a difference exist in how experienced counselors (EC) and less-experienced counselors (LEC) conceptualize the Q-Sort deck? If it is true that EC conceptualize

differently from LEC, it can be hypothesized that complexity of conceptualization is an important feature that distinguishes between these groups. This would raise our confidence both in the applicability of cognitive developmental premises within supervisory models and in the likelihood that the CDM is based upon sound premises.

The question of the role experience plays in the development of counselors and supervisors has been a subject of debate throughout the eighties. Worthington's 1987 literature review concludes that little research has been completed that examines the actual behavior of counselors as they gain experience and even less research has been completed that examines the development of supervisors.

Overall, support has emerged for the view that: (1) counselors develop with experience (Heppner & Roehlke, 1984) but only if they are supervised (Wiley & Ray, 1986) and only including the caveat that the perceived change is limited to the difference between beginning counselors and all others (Worthington, 1984). The softness of these findings has led several authors to suggest looking beyond experience towards other possible factors (Holloway & Wolleat, 1980; Reising & Daniels, 1983), (2) supervisors do not become more competent with experience (Worthington, 1984) and though they tend to alter supervision style as the supervisee gains experience (Raphael, 1982) they are unable to differentially discriminate what counselor's need as they gain experience (Miars, 1983), and (3) the criteria by which change is

measured is variable, imprecise and tends to avoid the study of actual behavior (Worthington, 1987).

More recently, Borders, Fong and Niemeyer (1986) responded to the need to integrate developmental premises more fully with supervision theory by examining the link between different measures of adult development and experience. Recognizing that a discrepancy existed when developmental supervision theory was studied by matching experience level to proposed developmental stage, Borders instead examined the link between level of ego development and level of experience with perceptions of clients. This research suggested there was a significant relationship between ego development level and the content of perceptions about clients.

In this study it is hoped to further pursue the link between experience and conceptual ability by asking subjects representing a range of counseling experience to sort a Q-Deck. It is expected that experienced counselors (EC) will conceptualize supervision differently from less experienced (LEC) and that this difference will be manifested in two ways: First, EC are expected to be more attentive than LEC to factors that are generally represented as important in the supervision literature. These factors parallel the three dimensions of the CDM and include the focus of comments (Focus), variance in the modality used (Modality) and the depth with which therapeutic issues are conceptualized (Cognitive Developmental Level).

Secondly, EC are expected to label their sorts differently from LEC. For example, it may be that all EC identify their sorts by formal conventions that fall within specific conceptual systems while LEC identify their sorts according to a variety of dimensions that lack an overall conceptual integrity. Such a finding would allow us to state that a difference exists in the ability to formulate conceptualizations based upon integrated systems of ideas. This in turn would suggest that differences in cognitive developmental level exist and would allow for the creation of hypothesis regarding specific skills, attitudes and/or dimensions of competence that may define supervision practice.

2. Method

In this study three sorting procedures were performed: (1) Subjects at different levels of experience categorized a standard set of items representing "pieces" of supervision dialogue in the form of question and answer sequences (see Study I). These sorts were then subjected to Individual Scaling (see SPSSx, 1986) in order to determine whether different levels of complexity could be discerned in the linkage between subject's categorizations. (2) The labels assigned by subjects in the first sort (here after referred to as the original sort), totaling 241 and representing each category to which they sorted Q-Cards, were sorted by three fourth year doctoral students working as a team. They attempted to identify, as a team, which labels explicitly

utilized the concepts of Focus, Modality or Cognitive Developmental level. (3) The labels assigned by subjects in the original sort, totaling 241 representing each group to which they sorted Q-Cards, were grouped according to sorter and thus totaled 46. These 46 sets of labels were sorted independently by four fourth year doctoral students with instructions to divide these labels according to three levels of experience: novice, intermediate and expert counselor.

3. Item Development

(1) See Study I for a description of the item development of the original Q-Sort deck.

(2) All labels assigned to groups of cards during open ended sorts of the 48 card deck were assembled on slips of paper with one slip of paper for each label assigned. This represented a total of 241 labels on 241 slips of paper.

(3) All labels assigned to groups of cards during open ended sorts of the 48 card deck were assembled on slips of paper with one slip of paper for all the labels composing each individual subject's sort. This represented a total of 241 labels divided according to subject and equaling 46 slips of paper.

4. Subject Selection

(1) Subject's were selected to maximize diversity in levels of professional experience. A total of 46 subjects were selected representing four groups with differing levels of experience. These four groups were: Masters students

(12), Doctoral students (10), Faculty Members in counselor training programs throughout the Western United States (16) and Counselor/Supervisors with a minimum of five years of supervisory experience (8). Thus four groups were created: Masters, Doctoral, Faculty and Counselor/Supervisor.

(2) Three fourth year doctoral students in their internship year were asked to work as a group and make unanimous choices. They were to decide whether the dimensions of the CDM were explicitly used by the subjects sorting the original Q-Sort deck.

(3) Four fourth year doctoral students were asked to work independently sorting the labels of the original subject groups according to three levels of experience: novice, intermediate and expert.

5. Procedure

(1) As in Study I, an open card sorting procedure was utilized. Each defined group of subjects was instructed to sort the cards into groups in such a way that all the cards in any group were similar to each other in some important way and different from those in other groups. Subjects were asked to name each group. No restrictions were placed upon the number of items per group or the number of groups.

Similarity matrices were computed from the results for the combined group of subjects. Frequencies of co-occurrence were determined for all pairs of items. These frequencies ranged between 0 (never sorted together) to 46 (sorted together by all subjects). These frequencies were

rescaled to squared euclidian distance measures of proximity. Results of the group sorts were subjected to Individual Scaling.

(2) In the second procedure, three subjects, working as a group, were asked to sort 241 labels each on its own slip of paper. These 241 slips of paper represented all the labels assigned to groups of cards by the original 46 sorters. Subjects were asked to sort these labels according to an inclusion/exclusion criteria relative to the three dimensions of the CDM (Focus, Modality and Cognitive Developmental level). Three sorts were performed, one for each of the dimensions. In essence the sorters were asked to answer the question, "Does this category label explicitly utilize the dimensions of Focus, Modality or Cognitive Developmental level?" The three subjects were asked to reach agreement among themselves regarding inclusion and exclusion; thus arriving at one set of data.

(3) In the third procedure, four subjects, working independently, were asked to sort 46 sets of labels on 46 pieces of paper. These sets of labels represented the output of the 46 original subjects. Subjects were asked to sort them into three possible groups divided along a continuum of experience representing three possible groups: novice, intermediate or expert. In essence the sorters were asked to answer the question, "From the information provided, decide which of these subjects were novice, which were intermediate and which were experienced counselors?"

6. Results

a. Individual Scaling

Individual Subject's matrices were subjected to two dimensional nonmetric scaling according to an Individual Differences Euclidian Distance Model to determine individual differences among subjects in the use of these dimensions (see Figure 2.4).

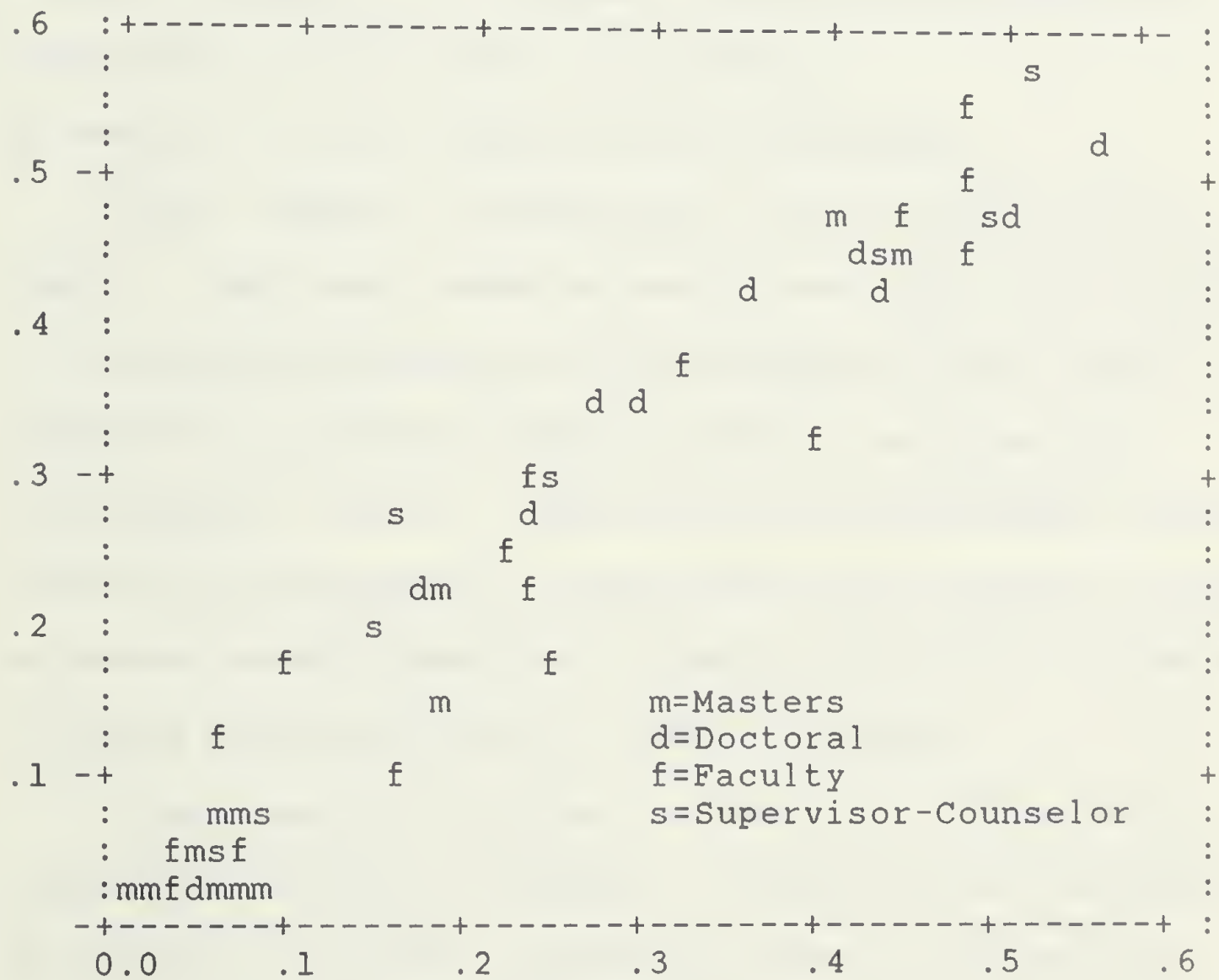


Figure 2.4

Individual Scaling

Overall, Doctoral students and Supervisor-Counselors clustered in the middle and upper right quadrant indicating

that most of them relied strongly upon these dimensions in their sorting. Masters students clustered in the lower left quadrant indicating that most of them did not rely on these dimensions in their sorting. Subjects from the Faculty pool were evenly distributed across the whole range indicating that some sorted according to these dimensions while some did not. Within all categories there were reversals. For instance, one doctoral student was in the lower left, two masters students in the upper right and two Supervisor-Counselors in the lower left quadrants.

b. Analysis of Sort Labels by CDM Dimensions

Three subjects, working as a group, sorted the 241 labels. They were asked to sort these labels according to an inclusion/exclusion criteria relative to the three dimensions of the CDM (Focus, Modality and Cognitive Developmental level). Three sorts were performed, one for each of the dimensions. The subjects were asked to reach agreement among themselves regarding inclusion and exclusion criteria and thus arrive at one set of data.

These results are shown in Table 2.1. This Table represents two sets of figures. Both sets are expressed as percentages of totals. These two sets of figures are represented as a/b where a is the percentage of all sorts (Total sorts: M=12, D=10, F=16, C/S=8) that explicitly used CDM dimensions and b is the percentage of all labels (Total labels in sorts: M=54, D=63, F=81, C/S=43) in all sorts that used CDM dimensions.

Table 2.1

Analysis of Sort Labels
by CDM Dimensions

	Both Focus & Modality	Either Focus or Modality	Cog. Dev. Level	No Explicit Dimension
Mas	.33/.11	.83/.74	0/0	.50/.26
Doc	.58/.41	1.00/.90	0/0	.42/.09
Fac	.69/.39	.88/.81	0/0	.50/.17
C/S	.30/.14	.40/.33	.13/.09	.50/.51

In the Masters category, conceptualizations that could not be explicitly identified as pertaining to the CDM dimensions were distributed among the sorts and were relatively simple. It was difficult for sorters to imagine how the dimensions of the CDM might be contained within the conceptualizations. They were typified by such labels as: "memory, possibility, interpreting, way of being and directness".

In the Counselor/Supervisor category, where labels that could not be conceptualized comprised 51% of all labels employed, half of the sorts were comprised entirely of conceptualizations impossible to sort by explicit reference to the CDM dimensions. These were relatively complex conceptualizations, and were felt by sorters to easily incorporate the CDM dimensions though these were not explicitly represented. These were typified by such labels as: "supervision issues-didactic focus, systems approach, psychodynamic, treatment process countertransference themes, and understanding empathy".

There were several important differences between experienced and inexperienced counselors identified by this sorting procedure:

(1) Compared to Masters students, Doctoral and Faculty groups were much more likely to include both focus and modality in their labels (58% & 69% vs 33% of sorts and 41% & 39% vs 11% of total labels).

(2) A sort explicitly including cognitive developmental level occurred only once. This was in the Supervisor-Counselor group.

(3) 51% of the Supervisor-Counselor categories did not explicitly refer to the CDM dimensions vs 26%,.09% & 17% for Masters, Doctoral and Faculty. However, examination of these non-explicit labels suggested that a difference existed between inexperienced and experienced counselor conceptualizations. This difference appears to be the employment of more complex conceptualizations by experienced counselors. These complex conceptualizations appear more likely to incorporate the CDM dimensions though they do not explicitly name them.

c. Analysis of Sort Labels by Experience Level

All sorts were independently sorted by four fourth year doctoral students along a three stage continuum of experience. Subjects were asked to include a novice, intermediate and expert category. The results are shown in Table 2.2.

Table 2.2

Analysis of Sort Labels
by Experience Level

	Novice	Intermediate	Expert
Mas	35	10	3
Doc	11	24	5
Fac	13	43	6
C/S	6	12	14

When subjected to Chi Square analysis, these sorts reveal significant differences as follows:

(1) Masters level sorts, compared individually to Doctoral, Faculty and Supervisor-Counselor sorts, were significantly different at the level of .001. This is explainable by the high number of Masters sorts occupying the Novice category.

(2) Doctoral level sorts, compared individually to Faculty and Supervisor-Counselor sorts, were not significantly different.

(3) Faculty sorts, compared individually with Supervisor-Counselor sorts, were significantly different at the level of .001. This suggests that the proportion of Supervisor-Counselor sorts placed in the Expert category were significantly higher than Faculty sorts placed in this category.

Additionally, explanations for the assignment of conceptualizations to each category all suggested that complexity of conceptualization was the criteria in use by the four sorters. For instance, the following are the conceptualizations employed for the "expert" category: (1)

"how interaction between client and therapist, and therapist and supervisor forms a system", (2) "abstractions that may incorporate different points of view", (3) "conceptualizations across categories" and (4) "most complex/sophisticated concepts".

7. Discussion

These results demonstrate that there is a significant difference in how experienced counselors conceptualize their sorts as compared with inexperienced counselors. Individual scaling demonstrated that Masters level counselors were less likely to sort according to the CDM dimensions than the three more experienced groups of Doctoral, Faculty and Counselor/Supervisor level counselors. This result was supported by the analysis of sort labels. This analysis demonstrated that experienced counselors were more likely to use the labels of the CDM dimensions in an explicit manner.

Further confirmation was received when the sort labels were subjected to a forced sort along the specific dimension of experience. This sort clearly differentiated between experienced and inexperienced counselors. In all four sorts the criterion used by sorters was related to the complexity of conceptualization employed by the original sorters. In addition, this sort also noted that the Faculty group was significantly different from the Masters and Supervisor-Counselor groups, a finding consistent with the Individual Scaling results that showed the Faculty group to be

distributed across the entire scale while Doctoral and Supervisor-Counselor groups were clustered in the middle and upper right quadrants.

One finding threatened to confound these results. The Supervisor-Counselor group was composed of counselors with a minimum of 5 years supervisory experience, yet they obtained the highest percentage of non explicit choices. A review and comparison of the actual labels within this category demonstrated that the conceptualizations they employed were more complex than the Masters group and therefore more likely to include the dimensions of the CDM though without explicit reference to them. Thus an adequate explanation of this phenomena was established.

In Study I it was suggested that an explanation for the higher level of variance in Masters and Supervisor-Counselor sorts was the inclusion of multiple CDM dimensions within single labels. This study supports this conclusion by demonstrating that this explanation is true of Supervisor-Counselor, Faculty and Doctoral sorts while not being true of Masters sorts.

D. Study III

1. Introduction

Can doctoral students with a minimum of training reliably locate the dimensions of cognitive developmental level, modality and focus within a Q-Sort deck consisting of limited samples of supervision dialogue? If so, it would be possible to hypothesize that the CDM can be learned with

reasonable ease and has great potential utility as an aid in research and as a clinical tool in supervision.

Supervision has long been accepted as an essential element in the education of counselor trainees and the ethical provision of clinical services by professionals. Though a variety of assumedly effective supervision models exists (see Lanning, 1986; Worthington, 1987), there is little consensus about how to match approaches to counselor-trainees' individual differences. As Blocher (1983) has aptly stated "Generally, supervision is something done rather casually with a 'seat of our pants' approach".

Theorists are now concentrating their efforts upon cognitive developmental models of supervision that recognize the salience of differences in persons, appropriateness of different formats and styles of supervision (Benack, 1988; Borders, Fong & Neimeyer, 1986; Ellis, 1988; Stoltenberg and Delworth, 1987). However, the underlying assumptions and principles of the proposed models are being seriously questioned (Holloway, 1987) and little progress has been made in the actual measurement of supervisor's or supervisees' cognitive development and related conceptualizations as they are evidenced within counselling domains.

Instruments need to be constructed that will measure cognitive development in domains that are directly related to counseling performance. At present, research must rely on instruments which measure very general aspects

of cognitive development (see Benack, 1988; Borders & Fong 1989). Such instruments lack practical utility and little can be expected from their application.

The promise of the CDM is that it will provide a simple method of describing supervisees' level of cognitive development within domains essential to counselling performance and that this method can be effectively learned with a minimum of training. Thus CDM proposes to be a high utility tool available to the great majority of supervisors both in training programs and in the field.

To insure the utility of this method in supervision, several steps have been taken: (1) this method has been based on the natural language used by trainees in the discussion of their work in supervision sessions, (2) initial research on the validity and reliability of this method uses limited samples of supervision langauge (single questions and answers), (3) domains of counseling knowledge have been limited to two essential dimensions (focus of comments and modality employed) and (4) training of raters for research purposes is limited to a minimum of time (from one to three hours).

While the ultimate goal of this research is to establish an efficient, ecologically valid method of studying counselor development and aiding supervisors in the field, this study hopes to demonstrate that persons with a minimum of training are capable of reliably identifying the dimensions of modality, focus and cognitive developmental

level. In pilot studies, minimally trained scorers were able to achieve 78% exact agreement and 95% agreement within one developmental level when scoring transcripts of selected aspects of supervision interaction (Carey & Ivey, 1988). An outcome exceeding 80%, achieved from isolated question and answer samples, would convince us that these dimensions of supervision language are recognizable and that persons can be trained to identify them from minimal clues. This would pave the way for more detailed studies using transcripts of supervision sessions.

2. Method

Participants in this study were divided into three groups and training methods varied slightly for each group. Group I were members of a seminar in supervision which utilized the elements of the CDM throughout the semester, but were never offered a formal training in its use. These doctoral students supervised masters level practicum students. In their turn, these doctoral students received supervision in a group format.

During the semester it was explained that supervision would proceed from the basis of the cognitive developmental model and its dimensions were described without formal training being provided. Supervision was offered from three points of view: 1) encouraging increased complexity of conceptualizations, 2) expanding the focus of language used to include all foci and 3) enlarging the field of modality employed on a normal basis.

At the conclusion of the semester subjects were given three identical Q-Sort decks and asked to sort each deck once. Sorts corresponded with the dimensions of the CDM: Focus, Modality and Cognitive Developmental Level. Thus for the Focus dimension sorts were performed that divided the deck into four possible categories: Client, Client-Counselor Interaction, Counselor and Counselor-Supervisor Interaction. For the Modality dimension sorts were performed that divided the deck into three possible categories: Affect, Behavior and Cognition. For the Cognitive Developmental Dimension sorts were performed that divided that deck into four possible categories: Elemental, Concrete, Formal and Post Formal. Four completed sorts were returned

Group II received a seminar on supervision that included a training on the use of the CDM. The seminar was scheduled for two hours, began ten minutes late and required twenty minutes for sorting at the end. In the remaining 90 minutes it was necessary to overview the field of supervision, devote specific time to the question of variance between individual and group supervision and introduce the CDM. Thus CDM training was limited to a period of time that did not exceed one hour.

At the conclusion of this training, subjects were given one Q-Sort deck and asked to perform one sort. This sort corresponded to the dimension of Cognitive Developmental Level and included the four categories of Elemental,

Concrete, Formal and Post Formal. Ten sorts were completed and returned.

Group III were members of a seminar in supervision that received formal training in the CDM at the beginning of the semester. This training lasted three hours and was according to the format established in the Training Manual for Cognitive Developmental Supervision (see Appendix E). This included an introduction to the model, training in scoring criteria for each dimension of the model, viewing a videotape demonstrating subjects at three different cognitive developmental levels and practice scoring of a transcript.

At the conclusion of this training, subjects were given three identical Q-Sort decks and asked to sort each deck once. As with Group I, sorts corresponded with the dimensions of the CDM: Focus, Modality and Cognitive Developmental Level. Four completed sorts were returned.

In summary, participants in Group I were exposed to one semester of supervision that utilized the essential elements of the CDM but received no formal training. Participants in Group II received a one hour training in the CDM as part of a clinical seminar on supervision. Group III participants were trained according to the format established in the Training Manual for Cognitive Developmental Supervision.

3. Item Development

See study I.

4. Subject Selection

Participants were from three subject pools. Group I participants were Doctoral level students enrolled in a supervision seminar. Group II participants were Doctoral students in their internship at a major teaching hospital in Boston, Ma. Group III participants were Doctoral students enrolled in a supervision seminar.

5. Procedure

Trained raters form Groups I and III were required to perform three sorts. Each sort conformed to one of the dimensions of the CDM. The first sort was for the Focus dimension and subjects were instructed to sort the deck into four categories labeled client, client-counselor interaction, counselor and counselor-supervisor interaction. The second sort was for the Modality dimension and subjects were instructed to sort the deck into three categories labeled affect, behavior and cognition. The third sort was for Cognitive Developmental level and subjects were instructed to sort the deck into four categories labeled elemental, concrete, formal and transformational. The trained raters in Group II, due to time constraints and our own belief that the dimensions of Focus and Modality were relatively stable, were instructed to sort the deck once along the dimension of Cognitive Developmental level. They sorted the deck into four categories labeled elemental, concrete, formal and transformational.

At the conclusion of sorting, all categories were labeled and sorts were collected. The results were analyzed to establish inter-rater reliability by measuring the percentage of correct responses across raters within groups.

6. Results

The following figures represent the results of the sorts of each group expressed as percentages of cards identified correctly.

Table 2.3

Results of Trained Rater Sorts

Group I

	Focus				Modality				Cog Dev Level			
	C	C/C	Co	C/S		A	B	C		E	C	F	PF
Cl	100	0	0	0	A	98	2	0	E	75	10	8	4
C/C	6	85	6	0	B	9	72	17	C	23	50	20	2
Co	0	13	83	0	C	5	5	89	F	2	31	63	33
C/S	0	0	3	96					PF	0	8	8	58

Group II

	Cog Dev Level			
	E	C	F	PF
E	52	8	12	2
C	27	58	19	4
F	18	21	57	40
PF	3	13	13	53

Group III

	Focus				Modality				Cog Dev Level			
	C	C/C	Co	C/S		A	B	C		E	C	F	PF
Cl	92	4	4	0	A	89	8	3	E	58	20	15	17
C/C	8	92	0	0	B	3	73	23	C	23	38	29	8
Co	0	2	98	0	C	0	5	95	F	15	31	40	38
C/S	0	0	0	100					PF	4	10	19	35

These tables demonstrate the following results:

1) Across all groups the Focus dimension is accurately assessed at a rate of 93%. Within this dimension all samples are accurate at 80% or higher.

2) Across all groups the Modality dimension is accurately assessed at a rate of 86%. Within this dimension subjects showed the greatest difficulty accurately identifying the behavior category (72.5%). An analysis of errors in this category shows that only four cards (6% of the total Q-Sort deck) are responsible for 31% of the errors.

3) Across all groups the Cognitive Development dimension is accurately assessed at a rate of 53%. Within this dimension subjects showed the greatest ease identifying the elemental category. An analysis of errors for this dimension shows that in each category, 3 cards (25%) were responsible for a high proportion of the errors: Elemental 48%, Concrete 45%, Formal 40% and Post Formal 40%.

7. Discussion

This study indicates that it is possible for doctoral level students, with a minimum of training, to accurately identify the dimensions of Focus and Modality from minimal samples of supervision dialogue with a high degree of accuracy. Related to this finding is the fact that a third of the errors within the behavior category of the Modality dimension, the category with the lowest reliability, were attributable to 4 cards. An analysis of these errors shows that cards 51, 59 & 83 were placed in the Cognition category

53% of the time. This indicates a non-random pattern to the errors.

Thus the difficulty sorters experience is not generalized across the domain of Modality or even the subcategory of Behavior so much as it is fixed upon four cards that represent presumably more confusing examples of the difference between behavior and cognition. We feel confident that an expansion of the sample beyond a single question and answer, or additional training in the use of the model, would be sufficient to rectify these errors.

In the domain of cognitive development, minimally trained raters were able to successfully identify the categories 53% of the time. We are encouraged by several aspects of these results:

1) Group I, never formally trained but exposed to the CDM in supervision for one semester, successfully identified the categories 61% of the time as opposed to Group II and Group III who were successful 55% and 43% of the time respectively. This indicates that a longer term exposure, even without formal training, may significantly increase the ability of students to accurately assess this dimension.

2) A high proportion of the errors were attributable to a small proportion of the cards. Within the Elemental category, 48% of the errors were attributable to three cards, within the Concrete category, 45% were attributable to three cards, and within both Formal and Post Formal categories, 40% were attributable to three cards. Thus

almost half of the errors were attributable to a quarter of the cards.

Within the Elemental Dimensions two of the cards were scored as concrete 81% of the time. Within the Concrete Dimension three cards were scored as formal or post formal 76% of the time. Within the Formal dimension, one card was sorted as Concrete 73% of the time and another as Postformal 73% of the time. Within the Post Formal dimensions, three cards were sorted as formal 67% of the time. Thus the distribution of the cards contributing most substantially to the error was not random.

It appears that these consistent errors may be explained by a difficulty making subtle distinctions in the language representing the differential between neighboring stages of cognitive development. For example, on two of the cards assessed as concrete rather than elemental, the language arguably represents logic with a simple before and after sequencing. Witness card 07, supervisor question: "After his mother said that, what did your client do?" A sorter might understand this as a question requesting a before and after analysis which is reasoning at the concrete level.

Let us take another example. On all three of the cards within the Concrete category that were mis-assessed as formal or postformal, there is language suggesting that the supervisee must consider how events form a pattern or a request for a different (therefore arguably multiple)

perspective. For example, card 11, supervisor question, "How has your view of what it means to be a counselor changed over the past few weeks?", and card 70, supervisor question, "How has your view of our relationship changed?"

The first of these examples may be interpreted as requiring the supervisee to form a typical idea of what counseling represents. If so, this is a formal mode of thinking. The second question suggests that there may have been a change in perspective. Such a change may actually involve multiple perspectives. This is a Post Formal attribute.

Thus it appears that a high proportion of the errors may be the result of the complexity of the examples in the Q-Sort deck. If so, it may be assumed that an increase in sample size, or a decrease in sample complexity, would allow raters to more accurately assess cognitive development.

We are encouraged by these results. The high percentage of correct responses suggests that with minimal training, two of the three dimensions are easily identified from minimal samples. The high concentration of errors within a few cards and the consistency with which these cards are sorted into other categories, suggests that the errors in all dimensions of the model are far from random. Preliminary analysis of these cards shoes that good reason may exists for the consistent sorting of these cards into neighboring developmental categories.

E. Discussion

The three questions considered in these studies were: (1) the relationship between counselor's level of experience and the conceptual systems they utilize in understanding supervision discourse, (2) the validity and reliability of the Cognitive Developmental Model's three dimensional matrix and (3) the feasibility of using open Q-Sort methodology to study qualitative differences in the complexity of conceptual systems.

It was expected that sorts of the Q-deck made by experienced counselors could be differentiated from those of inexperienced counselors by an examination of the conceptual level employed. The evidence of increased conceptual level was expected to be differentiated in a variety of ways. First, more experienced counselors were expected to sort using categories representative of skill domains essential to counselling. Second, sorts of more experienced counselors were expected to utilize category labels more inclusive of a variety of possible skill domains. Lastly, within individual expert sorts, the combined individual category labels of each subject were expected to fit within a single overarching concept.

Two of these characteristics were clearly present in the results of this study. Cluster Analysis, Multidimensional Scaling and Individual Scaling demonstrated that less experienced raters tended to sort by dimensions other than those represented by the CDM while more

experienced raters sorted by these dimensions. Analysis of the actual conceptualizations employed in labeling categories within sorts and categories across sorts demonstrated that experienced counselors employed more complex and thereby more inclusive conceptualizations. The final criterion, the presence of an overarching concept in expert sorts appeared to be true but could not be assessed with accuracy from the labels supplied by raters when sorting for expertness. A confounding variable was introduced when individual scaling results, and the analysis of category labels for explicit use of CDM dimensions, demonstrated that the Supervisor-Counselor group explicitly employed CDM dimensions with less frequency than Masters level sorters. However, this was explained by the obvious difference that existed between these groups in the complexity of the conceptualizations employed. Supervisor-Counselors used much more complex and inclusive labels when sorting categories. These labels were more likely to group CDM dimensions within more complex and encompassing conceptualizations.

Cluster and Multidimensional Scaling results centered upon the dimension of Focus. This was a clear indication that the Focus dimension was recognized as important by counselors at all levels of experience. However, it should be emphasized that due to the construction of the Q-Sort deck, the selection of one dimension made it impossible to select for the other two. A selection of Focus necessitated

that Modality and Cognitive Developmental dimensions would be excluded from significance.

It was also noted that the groups with the least (Masters) and the most (Supervisor-Counselor) actual counseling and supervision experience showed more variability in their sorts as opposed to the groups most firmly embedded in the academic experience. It is possible this represents a schism between the academic representation of counseling/supervision and the experiential. However, the analysis of labels conducted in Study II suggests that this variability may be attributable to a greater complexity of conceptualization on the part of the Supervisor-Counselor group, rather than any conceptual similarity with Masters sorts.

The third study demonstrates that the CDM can be reliably employed within the dimensions of Focus and Modality. Within the dimension of Cognitive Development, reliability was lower but still encouraging. In appraising this result the difficulty of the task and the nature of the errors must be considered.

Subjects were asked to assess cognitive developmental level from single questions and answers. This is suggestive of the Sufi story of the blind wise men each touching a different part of an elephant and describing what they hold. Each describes it differently because the sample they hold is so limited; likewise a single question and answer is a remarkably small sample from which to form such judgments.

In practice, the entire verbal exchange would be available. Identification under these experimental conditions is obviously more difficult. We feel confident further investigation of the CDM will yield confirmation that it is a valid tool with high reliability when used in the field by counseling supervisors and trainers.

Another factor increasing our confidence is the pattern created by mis-assessed cards. This pattern was not random. A small proportion of the cards were responsible for a very high percentage of the total errors. These same cards tended to be assigned by most raters to the same category. Upon examination it appears that despite our best efforts, some ambiguity remains. Resolving this level of ambiguity appears to require more significant training, longer exposure to the CDM or more significant samples. Indeed, it was heartening to note that the group without formal training, but with a semester of exposure, had greater accuracy when assessing this dimension of the CDM.

In all three studies, Q-Sort methodology was employed. In the first study, analysis showed a dramatic tendency to sort according to the Focus dimension and illuminating this tendency by revealing subtle differences shown by each of the sub-groups. In the second study, analysis of individual variance showed that more experienced counselors tended to sort along at least one dimension of the CDM with more regularity than inexperienced counselors. This finding was verified using additional sorts both forced and unforced.

In the third study, a forced sort was employed and demonstrated that doctoral students with a minimum of training in the CDM identified the dimensions of Focus and Modality with great reliability while identifying the dimension of Cognitive Developmental Level with an acceptable degree of reliability.

Q-Sort methodology demonstrated clear findings each time it was used. In this particular study the goal was to demonstrate that Q-Sort methodology could be used to study qualitative differences in conceptualizations. The results demonstrate that it is well suited to this purpose and is flexible enough to be adapted as a check upon itself.

It should be noted that the analysis of sort labels proved to be crucial in understanding the results of the Cluster Analysis and Multidimensional Scaling results. While the results of these studies, if analyzed without this additional set of procedures, would have been accurate, they would have generated questions that were easily answered by the additional procedure. This suggests that analysis of the actual labels used in sorting a Q-Deck may be crucial in developing a full and accurate understanding of the results.

APPENDIX A

Q-SORT DECK

00 Q Does your client identify things in common among people who make her angry?
A She believes that indecisive, weak willed people, like her brother, press her buttons.

02 Q What does your client seem to think about you at this point?
A He thinks that maybe I won't be able to help him

03 Q What were you trying to do?
A I was trying to look relaxed and interested.

05 Q How do you feel right now?
A I feel uncomfortable...put on the spot.

06 Q Do the two of you repeat sequences of action?
A Yes, we even have rituals. Like he's always late, he apologizes and then I forgive him.

07 Q After his mother said that, what did your client do?
A He told her that she didn't want to discuss it with her any more.

09 Q What can you do to help yourself take more risks?
A I need to catch myself...and tell myself that I'm more present and alive when I let go of my fears about not doing the right thing.

11 Q How has your view of what it means to be a counselor changed over the past few weeks?
A I started out thinking I just needed to accept everyone, now I know its also important to challenge clients.

20 Q Do you have some idea of what we do when supervision sessions get tense?

A Usually one of us will tell a joke and the other will laugh, even if its not particularly funny.

21 Q If you thought of your client as confused rather than resistant, how would your interactions change?
A If I thought of her as confused... maybe even confused by me...I could stop hating him and put more effort into clarifying what each of us say.

22 Q What is it you imagine I am thinking about you now?
A I guess you're thinking that I'm trying to cover up a mistake.

24 Q Do you have any ideas about how we might use our theoretical differences to make the most out of supervision?
A I hope that when we have conflicting viewpoints, we can use those times to find creative ways to map out and examine our different perspectives.

25 Q How would our client's feelings towards her husband change if he were to show more emotion?
A She'd probably change from feeling cheated to feeling angry.

29 Q If your client were to list her thoughts during this episode, what would be the first and last items?
A Well...the first would be, "I know she'll reject me." and the last would be, "See, I was right."

30 Q What would be usual affect for the client to display in this situation?
A He typically gets angry and feels sorry for himself.

31 Q What's the typical pattern of emotions between you and the clients?
A I get really anxious whenever he feels sad.

32 Q What were you thinking about?
A I was trying to decide on what I wanted to talk about next.

33 Q How was my behavior towards you different now than before?
A Before you used to give me concrete suggestions, now you leave me to my own devices.

36 Q How do you conceptualize the problem you have confronting your male clients?
A I usually wonder whether or not gender will become an issue. This wondering keeps me from acting more spontaneously.

37 Q Can you describe exactly what went on between you and your client?
A She asked me about my credentials and I tried to assure her I was competent.

41 Q How do our goals for supervision seem to be similar and different?
A We both want to help the client solve the problem, but you're more interested in teaching me and I'm more interested in immediately helping my client.

43 Q How do my feelings about you now, feel different from the last supervision session?
A Last session you seemed not to trust me, now you seem to respect my judgement.

44 Q What do you normally do when a client questions you're credentials?
A I ask them why its important to them. Then I can respond more appropriately.

48 Q Can you describe the sequence of emotions your client reported?
A He started out feeling hurt, almost immediately became angry and wound up feeling guilty.

49 Q How does you client reconcile her pro-life stand with her awareness of the impact her teenage daughters pregnancy will have upon her child?
A She recognizes that she's being inconsistent, But she will not deny either the strength of her beliefs or the love of her child.

51 Q Can your client describe how his attempts to force his parents to reconcile, actually make it less likely they'll stay together?
A He seems to finally accept that he needs to disengage from their struggles to give them the chance to settle their disputes themselves.

54 Q How did your feelings for your client change after she said that?
A Before she said that I felt relaxed with her, afterwards I felt tense, on guard.

55 Q What's characteristic about the way you feel about me after our supervision sessions?
A I feel abandoned, like you've left me alone to go out and do something good.

56 Q How are your mutual feelings of affection effecting the process?
A We're both trying harder to make a good impression on each other than we are to really know each other.

58 Q How has your client's image of you changed during this session?
A He started out thinking that I'd be like his father. Now he knows I'm interested in helping him make his own decisions.

59 Q How does it happen that each time the two of you finally agree, the agreement gets undone.

60 Q What feelings are typical for you at this stage in the session?
A Well, I guess I'm usually frustrated because more progress hasn't been made.
62 Q What's different about your behavior before and after this point in the interview?
A Before this point I was reflecting content, after this point I reflected feelings.

66 Q What thoughts best describe the goals you and your client have decided upon?

A We both agree that she needs more insight as to how her early family history effects her behavior.

67 Q How do you reconcile the fact that different theorists have very different viewpoints on the importance of interpretation?
A The appropriateness of interpretation can only be judged within theoretical systems which are rooted in the world views of the theorists.

69 Q What did your client tell his brother and what happened next?
A He told him he wouldn't lend him the money and his brother started calling him names.

70 Q How has your view of our relationship changed?
A I used to think you wanted me to be just like you, now I know you respect my space.

73 Q How were you feeling in the session?
A I felt lost. I just didn't know what I was doing.

74 Q When you feel your anxiety building in sessions, can you experience it as excitement?
A Yes, if I feel it as excitement, I won't need to suffer and maybe I'll be able to enjoy myself.

75 Q How does your client normally defend against anxiety?
A He typically gets self deprecating and apologetic.

83 Q How could we test whether our estrangement today parallels your experience of the client we discussed?
A We could determine whether the reasons you feel uncomfortable with me are the same reasons I feel uncomfortable with my client.

84 Q How did your client feel about you then?
A He was frustrated with me.

85 Q Just before, when you said you were overwhelmed, what did I do?
A You looked away and changed topics.

86 Q When you get that anxious feeling, do you think it can clue you in to what's going on between us and then bring that awareness into our work?
A When I get anxious I'll check out whether I feel set upon by you. If I do, I'll say something instead of staying quiet.

87 Q What image might your client have of her husband?
A She might see him as a large and nasty ogre.

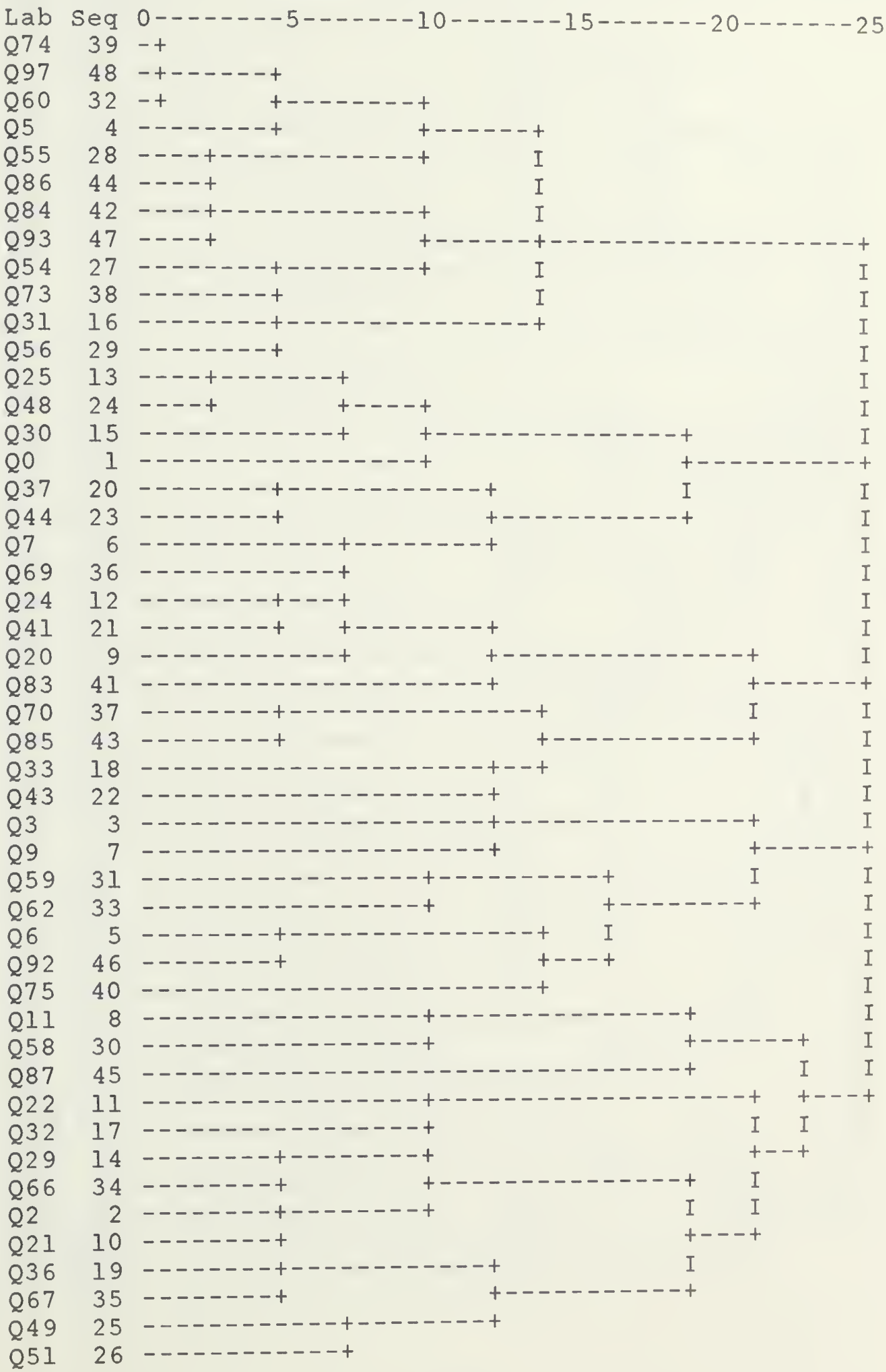
92 Q What did you do when your client raised his voice?
A I leaned back in my chair and got very quiet.

93 Q How was your client feeling at that point?
A She was angry with her husband.

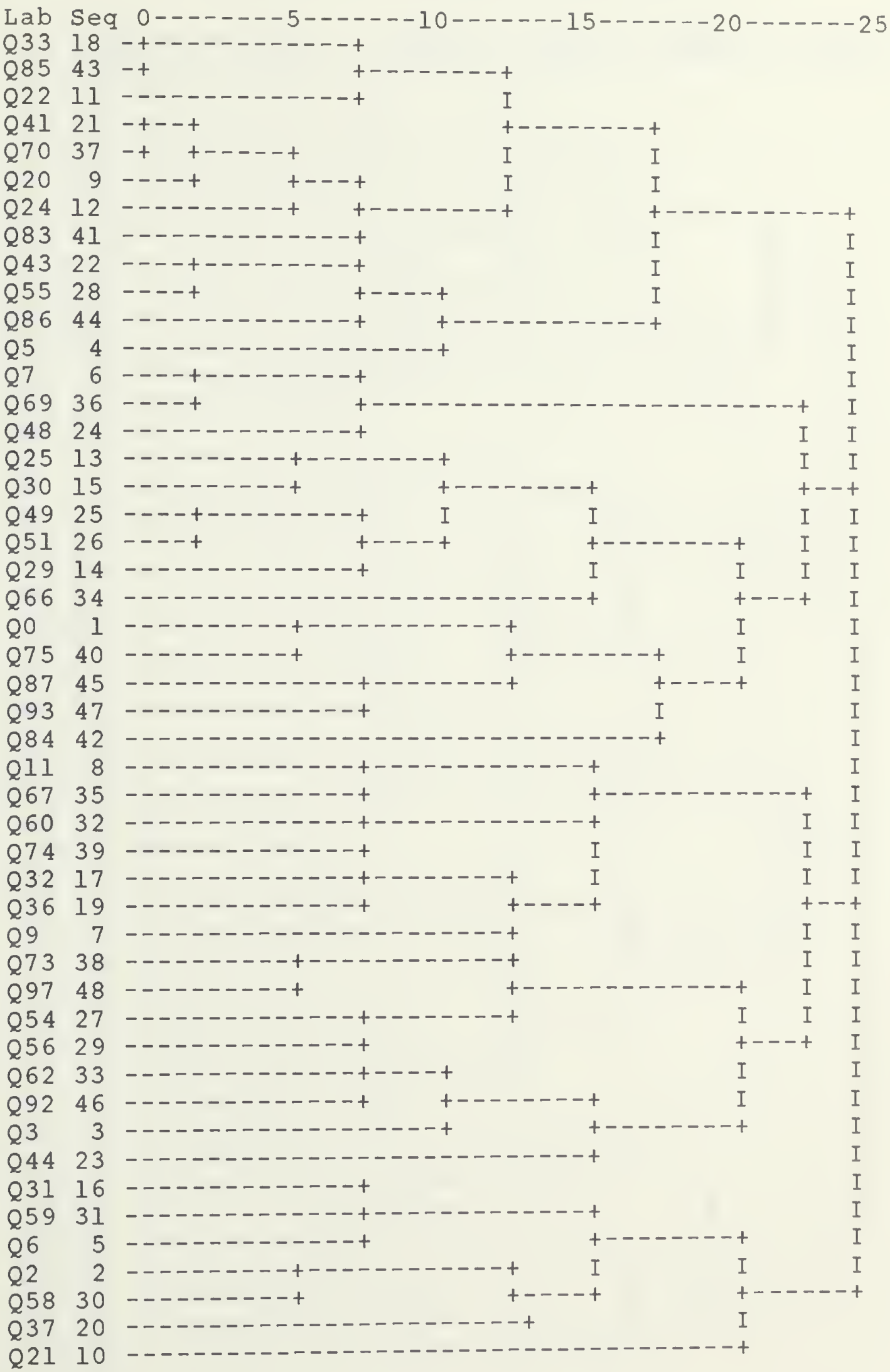
97 Q How were you feeling at the beginning and at the end of the session?
A At the beginning I felt self confident; at the end I felt like I didn't know what I was doing.

APPENDIX B
CLUSTER ANALYSIS RESULTS

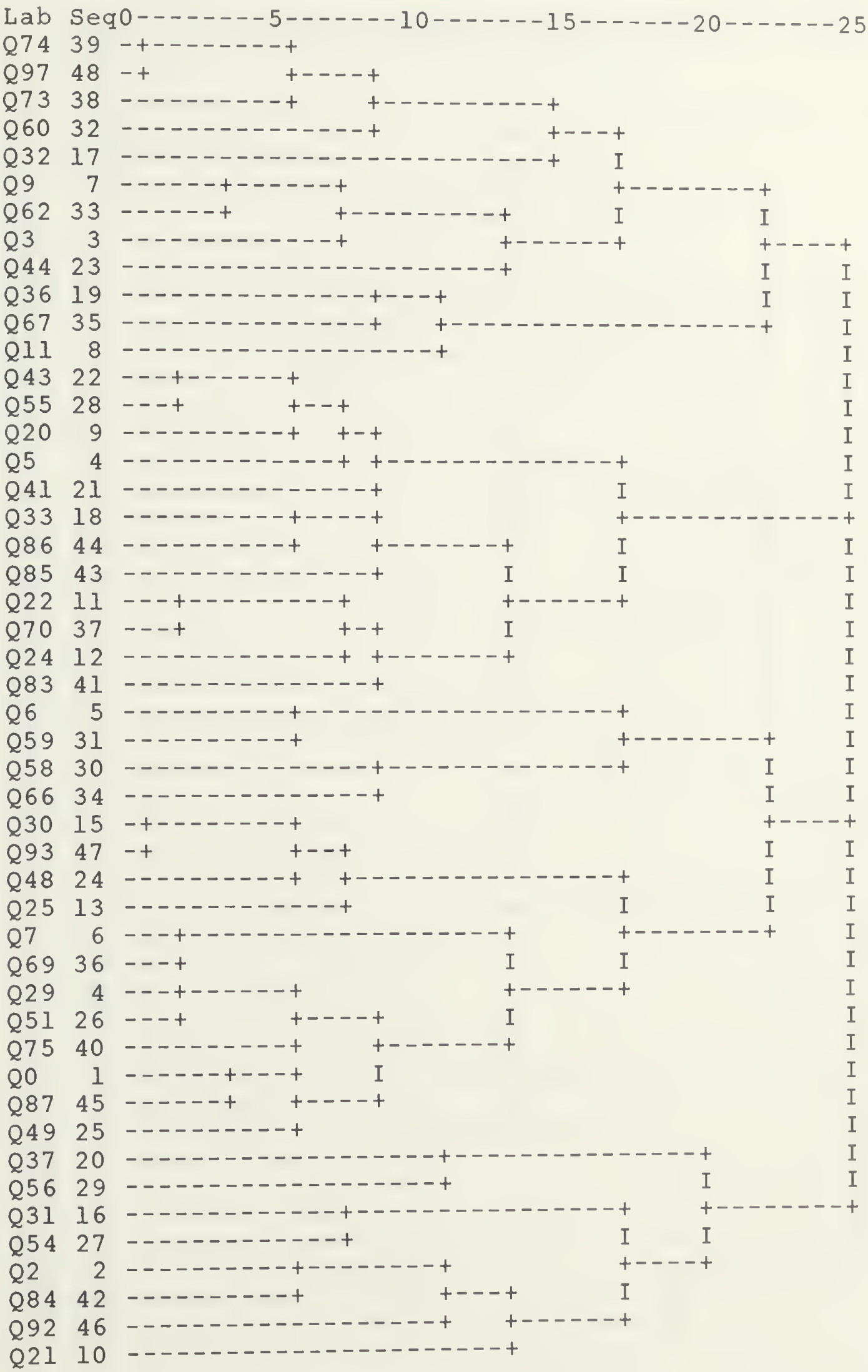
Masters Cluster Analysis



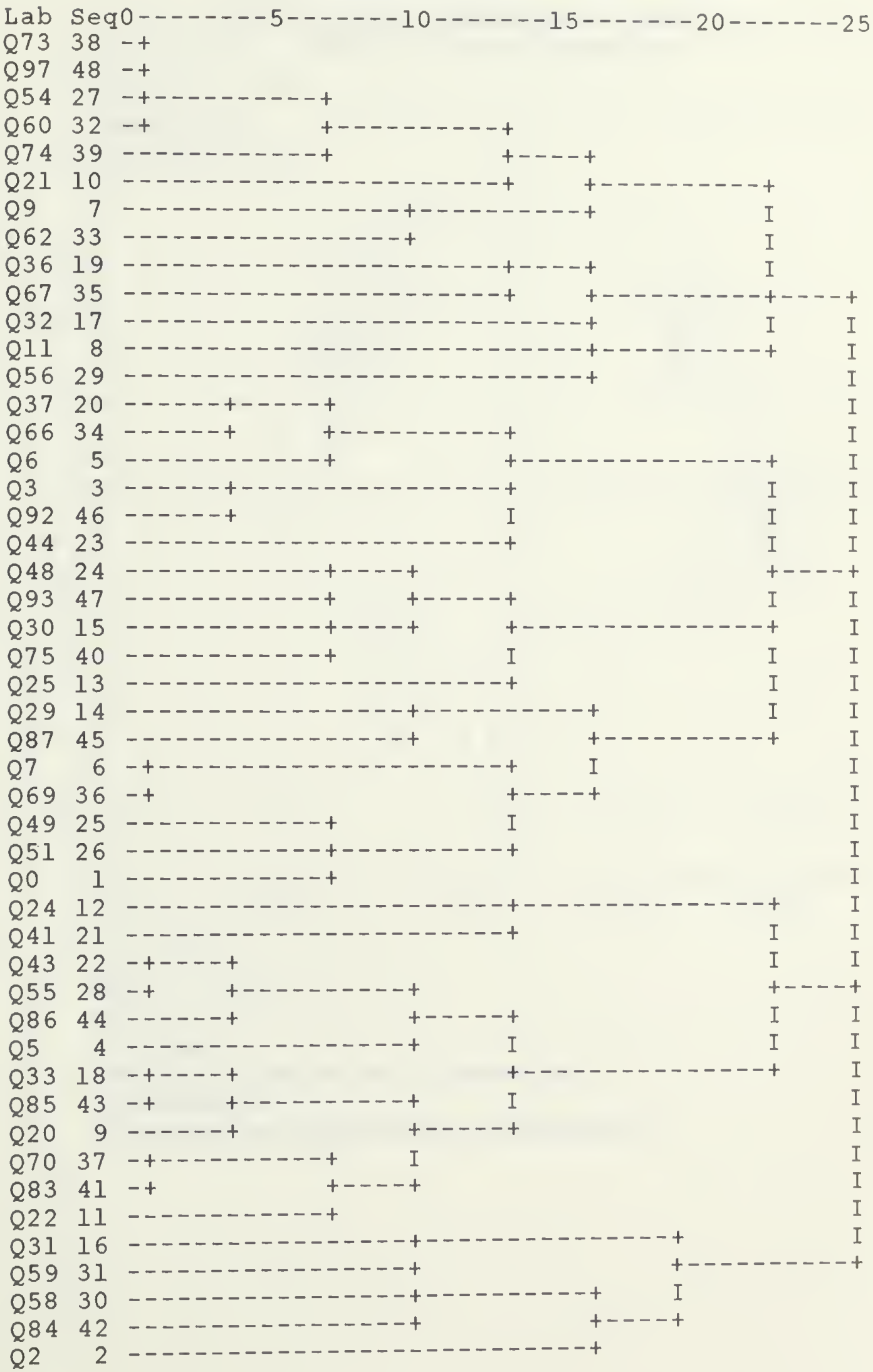
Doctoral Cluster Analysis



Faculty Cluster Analysis

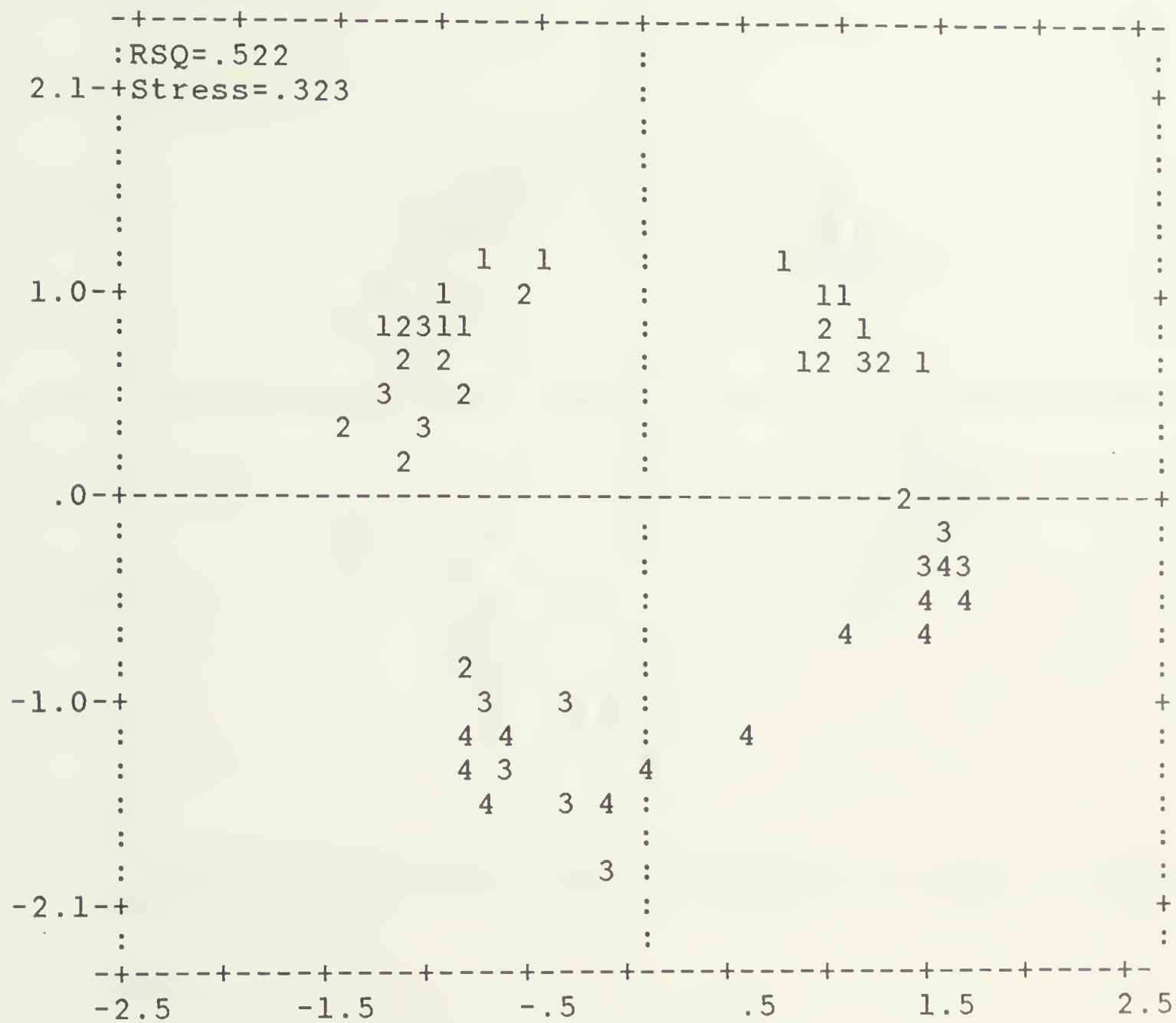


Supervisor-Counselor Cluster Analysis



APPENDIX C
MULTIDIMENSIONAL SCALING RESULTS

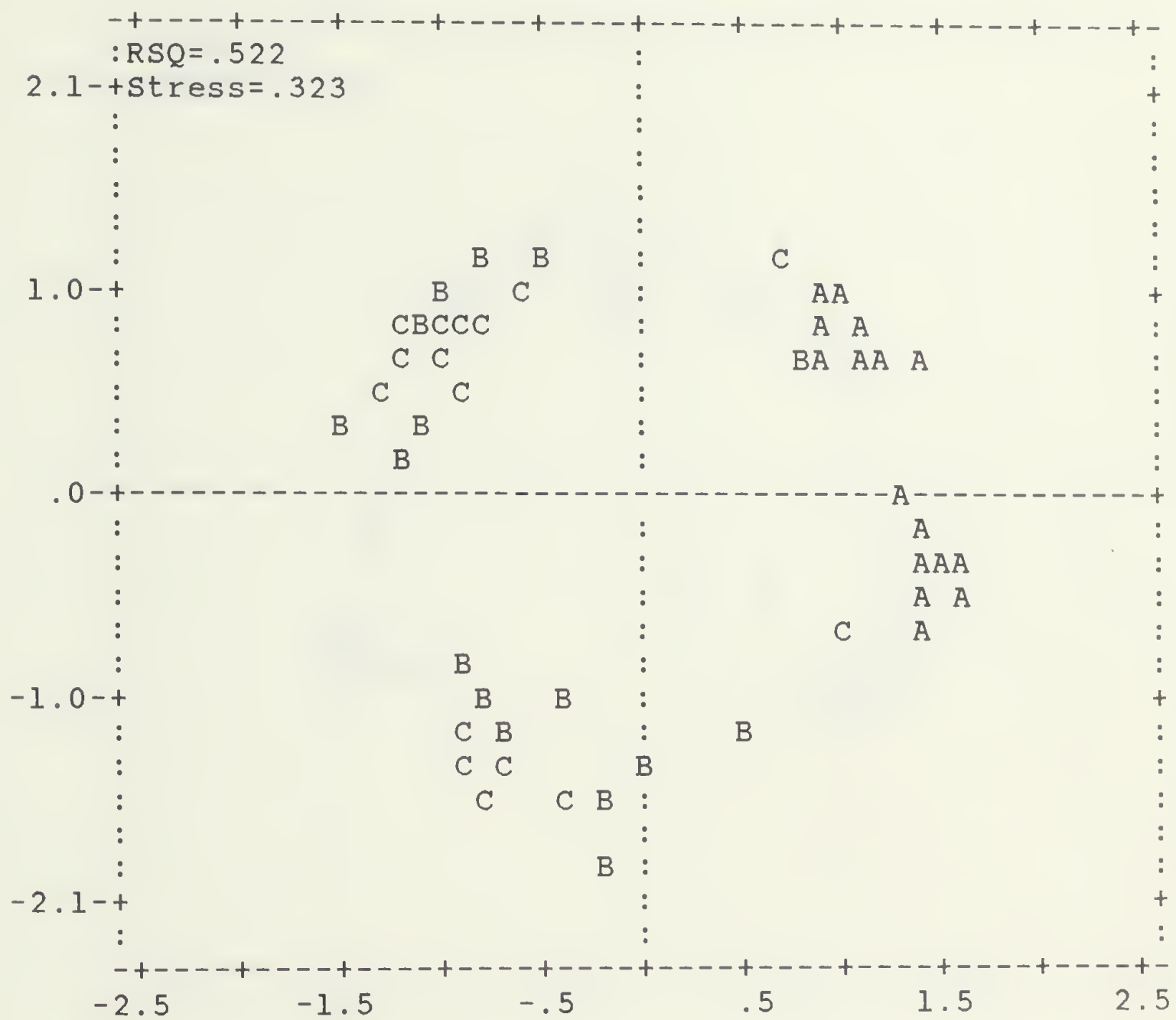
Masters Multidimensional Scaling
Showing Focus Dimension



Key:

1=Client
2=Client-Counselor Interaction
3=Counselor
4=Counselor-Supervisor Interaction

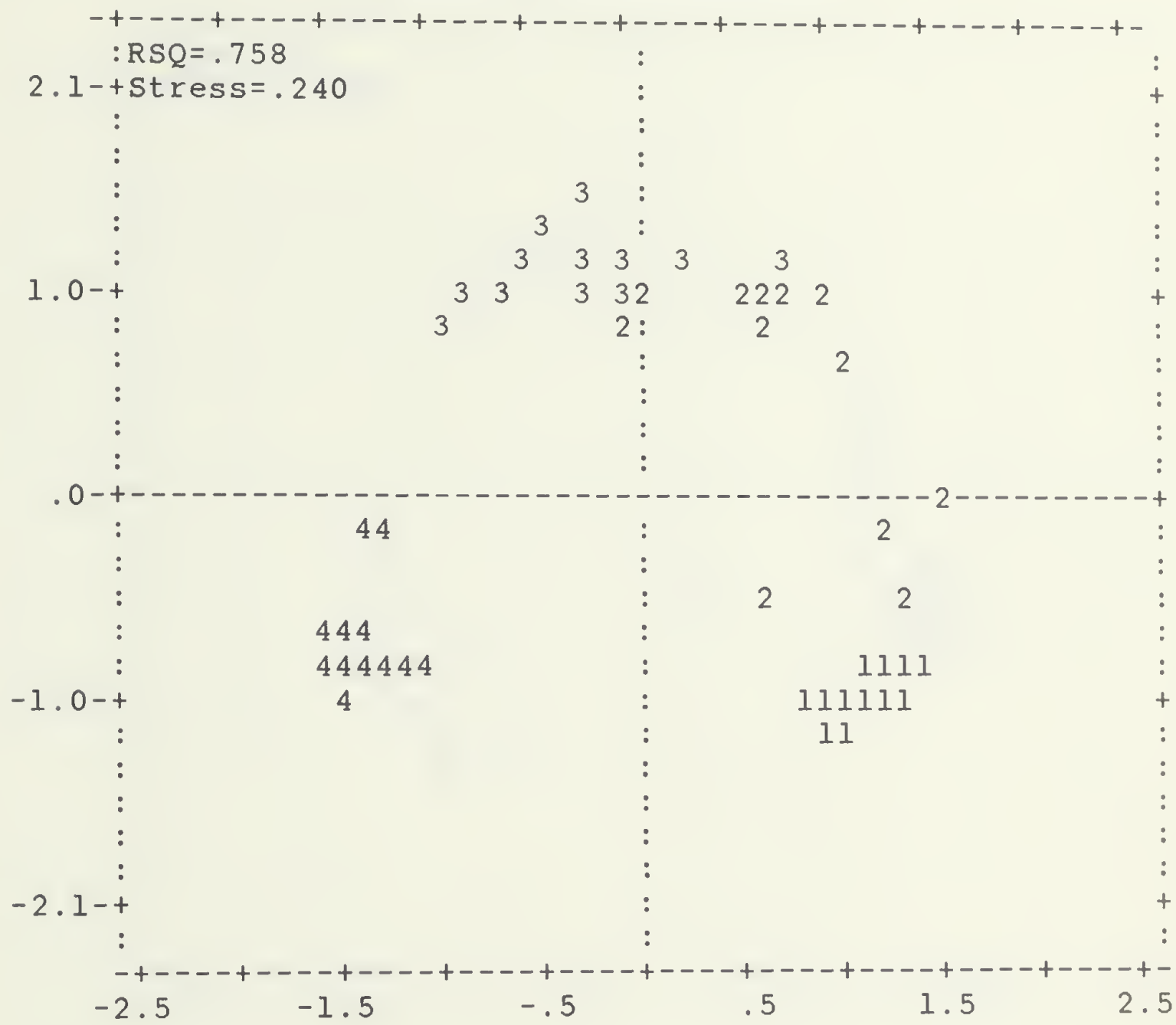
Masters Multidimensional Scaling
Showing Modality Dimension



Key:

A=Affect
B=Behavior
C=Cognitive

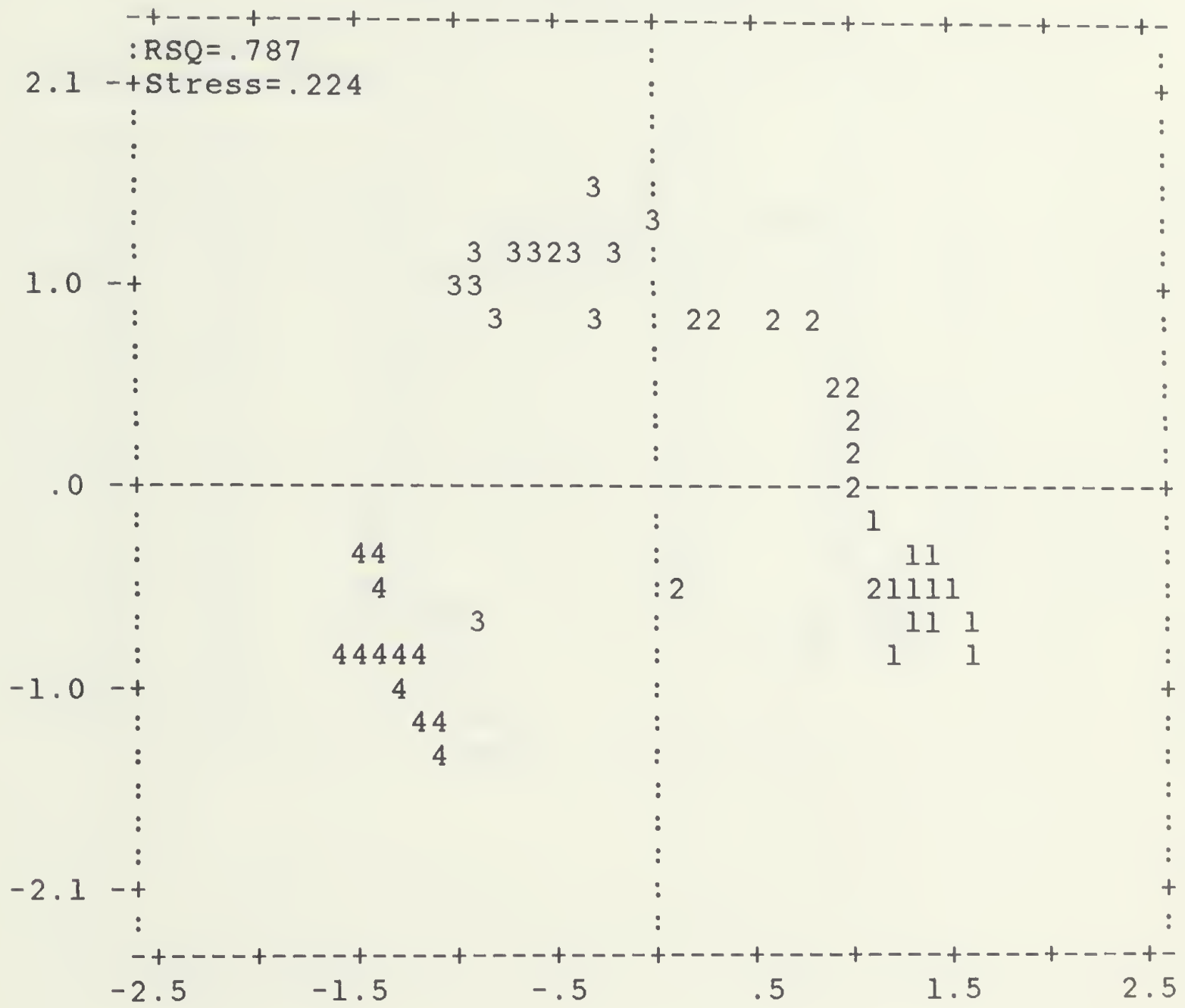
Doctoral Multidimensional Scaling
Showing Focus Dimension



Key:

1=Client
2=Client-Counselor Interaction
3=Counselor
4=Counselor-Supervisor Interaction

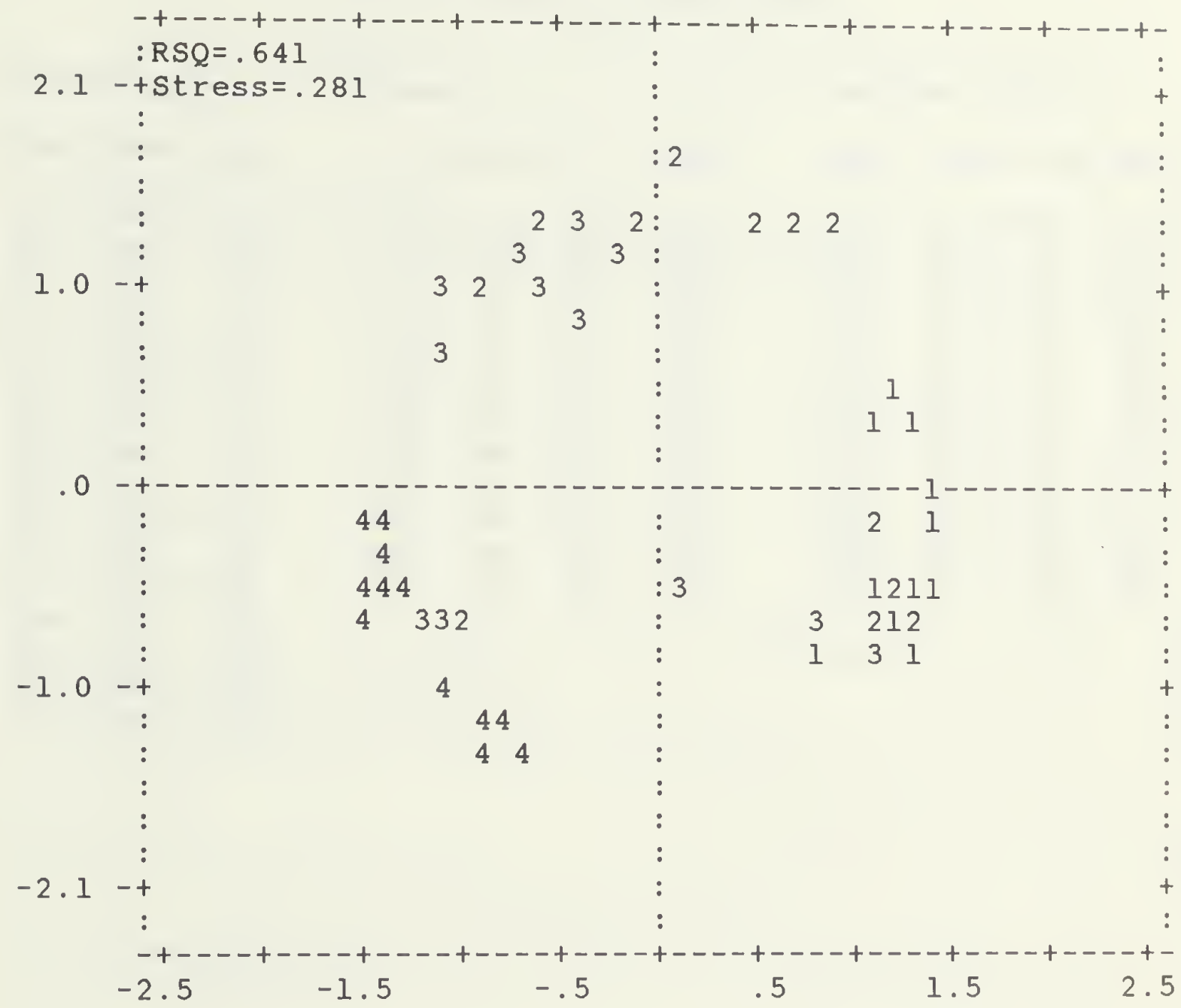
Faculty Multidimensional Scaling
Showing Focus Dimension



Key:

1=Client
2=Client-Counselor Interaction
3=Counselor
4=Counselor-Supervisor Interaction

Supervisor-Counselor Multidimensional Scaling
Showing Focus Dimension



Key:

1=Client
2=Client-Counselor Interaction
3=Counselor
4=Counselor-Supervisor Interaction

APPENDIX D

COMPOSITION OF Q-SORT DECK

Modality			Focus				Cog-Dev Level			
AFF	BEH	COG	CL	COCO	CO	COSH	EEL	CON	FOR	PF
05	03	00	00	02	03	05	02	11	00	09
25	06	02	07	06	09	20	03	29	06	21
30	07	11	25	21	11	22	05	33	20	24
31	09	21	29	31	32	24	07	37	30	25
43	20	22	30	37	36	33	22	43	31	49
48	33	24	48	54	44	41	32	48	36	51
54	37	29	49	56	60	43	73	54	41	56
55	44	32	51	58	62	55	84	58	44	59
56	51	36	69	59	67	70	85	62	55	67
60	59	41	75	66	73	83	87	69	60	74
73	62	49	87	84	74	85	92	70	66	83
74	69	58	93	92	97	86	93	97	75	86
84	75	66								
86	83	67								
93	85	70								
97	92	87								

APPENDIX E

TRAINING SEQUENCE

Initial training in the Cognitive Developmental Model will consist of three one hour segments:

FIRST HOUR	TIME
Introduction of model:	15
Video demonstrating use of the model during supervision	15
Training in the identification of dimensions	15
Training in identification of elements within dimensions	15
SECOND HOUR	
Identification of Cognitive Developmental Dimension	5
Elemental	13
Concrete	13
Formal	13
Postformal	13
THIRD HOUR	
Review	15
Problem solving of additional Cog Dev examples	10
Identification of Modality	15
Identification of Focus	15
Identification of all three dimensions	5
PART FOUR	
Review of practice sort	10
Sort for Cognitive Developmental Level	
Sort for Modality	
Sort for Focus	

APPENDIX F

RATINGS FOR COGNITIVE DEVELOPMENTAL LEVEL

Elemental Cards

	Group I				Group II				Group III				Combined				%
	E	C	F	PF	E	C	F	PF	E	C	F	PF	E	C	F	PF	
02	2	2			2		6	2	1		3		5	2	9	2	27*
03	3	1			6	4			3	1			12	6			67
05	4				4				10				18				100
07	1	3			2	8			1	3			4	14			22*
22	3		1		4	3	3		1		1	2	8	3	5	2	44
32	3	1			8	1	1		3	1			14	2	1		78
73	4				9	1			4				17	1			94
84	4				8		2		4				16		2		89
85	1	3			1	8	1			4			2	15	1		11*
87	4				2		7	1	1		3		7		10	1	39
92	3	1			3	7			2	2			8	10			44
93	4				7		3		4				15		3		83
																Avg	58
															-*	Avg	71

*cards: 02 mixed ID, 07 & 85 identified as concrete.

Concrete Cards

	Group I				Group II				Group III				Combined				%
	E	C	F	PF	E	C	F	PF	E	C	F	PF	E	C	F	PF	
11	1	3			3		4	3			2	2	4	3	6	5	17*
29		2	2		1	6	3		1	2	1		2	10	6		56
33		2	2			6	4			2	2			10	8		56
37	2	2			2	7	1		1	3			5	12	1		67
43		2	2			4	5	1	1		3		1	6	10	1	33
48		4				18			1	3			1	18			100
54	1	2		1		8	1	1	3	1			4	11	1	2	61
58		1	2	1		3	2	5	1		3		1	4	7	6	22*
62		2	2			9	1		1	2	1		1	13	4		72
69		4			1	9				3	1		1	16	1		89
70			2	2	1		4	5			2	2	1		8	9	00*
97	2	2			2	8			2	2			6	12			67
																Avg	53
															-*	Avg	67

* cards: 11 & 58 mixed ID, 70 identified as Formal or post formal

Formal Cards

	Group I				Group II				Group III				Combined				%
	E	C	F	PF	E	C	F	PF	E	C	F	PF	E	C	F	PF	
00		1	3		1	2	7				3	1	1	3	13	1	72
06			4		1	5	3	1		2	2		1	7	9	1	50
20		2	2			2	7	1	1	2	2		1	6	11	1	61
30		1	3			1	9			2	2			4	14		78
31		1	3		1	1	8		1	1	2		2	3	13		72
36		1	2	1			8	2			2	2		1	12	5	67
41			1	3			4	6				4			5	13	28*
44	1	1	2			8	1	1		4			1	13	3	1	17*
55	1	1	2		3	1	6		3		1		7	2	9		50
60	1		3		4	1	5		2	1	1		7	2	9		50
66		2	2		2	2	2	4			2	2	2	4	6	6	33*
75	1		3		1	1	8			2	2		2	3	13		72
																Avg	54
															-*	Avg	64

*cards: 41 identified as postformal, 44 identified as Concrete, 66 mixed ID.

Post Formal Cards

	Group I				Group II				Group III				Combined				%
	E	C	F	PF	E	C	F	PF	E	C	F	PF	E	C	F	PF	
09			2	2		2	4	4	1	1	1	1	1	3	7	7	39
21				4			3	7			1	3			4	14	78
24				4			2	8				4			2	16	89
25			2	2			7	3	2		2		2		11	5	28*
49			1	3			5	5			3	1			9	9	50
51			2	2			5	5	1	1	1	1	1	1	8	8	44
56		1	2	1	1		7	2		1	2	1	1	2	11	4	22*
59			3	1			7	3			4				14	4	22*
67			1	3			2	8				4			3	15	83
74	1		1	2	1	1	2	6	3		1		5	1	4	8	44
83			2	2		1	2	7			2	2		1	6	11	61
86	1		1	2		1	3	6	1	1	1	1	2	2	5	9	59
																Avg	52
															-*	Avg	61

* cards: 25, 56 & 59 identified as formal.

BIBLIOGRAPHY

Anderson, H. & Gelation, H. A. (1988). A view of human systems as linguistic systems: some preliminary and evolving ideas about the implications for clinical theory. Texas: Galveston Family Institute

Ard, B.N. (1973). Providing clinical supervision for marriage counselors: A model for supervisor and supervisee. The Family Coordinator, 22, 91-97.

Benack, S. (1988). Relativistic thought: A cognitive basis for empathy in counseling. Counselor Education and Supervision, 27, 216-232.

Bergin, A.E., & Lambert, M.J. (Eds.) (1978). The evaluation of therapeutic outcomes. In S.L. Garfield & A.E. Bergin (Eds.) A Handbook of Psychotherapy and Behavior Change: An Empirical Analysis, (pp. 139-189) New York: John Wiley & Sons.

Blocher, D.H. (1983). Toward a cognitive developmental approach to supervision. The Counseling Psychologist, 11, 27-34.

Blocher, D.H., Christensen, E.W., Hale-Fiske, R., Neren, S.H., Spencer, T. & Fowlkes, S. (1985). Development and preliminary validation of an instrument to measure cognitive growth. Counselor Education and Supervision, 9, 21-29.

Blount, C.M. (1982). A developmental model of supervision: Implications for practice and research. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Borders, L.D (1989). A pragmatic agenda for developmental supervision research. Counselor Education and Supervision, 29,16.

Borders, L.D. & Fong, M.L. (1989). Ego development and counseling ability during training. Counselor Education and Supervision, 29, 71-83.

Borders, L.D., Fong, M.L., & Neimeyer, G.T. (1986). Counseling students' ego development and perceptions of clients. Counselor Education and Supervision,26, 36-49.

Brown, J. (1987). A review of meta-analysis conducted on psychotherapy outcome research. Clinical Psychology Review, 7, 1-23.

Carey, J.C. & Ivey, A.E (1988). Uses of the Cognitive-Development Model of Supervision in research and practice. Paper presented at the national meeting of the Association for Counselor Education and Supervision.

Carey, J.C. & Shaughnessy, E.A. (1990). Training manual for cognitive developmental supervision. Unpublished manuscript.

Carey, J.C. & Shaughnessy, E.A. (1990). A stage-based cognitive-developmental model of clinical supervision. Manuscript accepted for publication by Counselor Education and Supervision.

Commons, M.L., Meaney, M. & Weaver, J.H. (1990). Combining traditional kohlbergian scheme and general stage model scoring of moral stages. Paper presented at the Fifth Adult Development Symposium: Cambridge, Ma.

Doehrman, M.J.G. (1976). Parallel processes in supervision and psychotherapy. Bulletin of the Menninger Clinic, 40, 9-104.

Ellis, M.V. (1988). The cognitive developmental approach to case presentation in clinical supervision: A reaction and extension. Counselor Education and Supervision, 27, 259-264.

Erdynast, A. (1990). A four domain model of intellectual moral and aesthetic development. Paper presented at the Fifth Adult Development Symposium: Cambridge, Ma.

Fischer, K.W. (1980). A theory of cognitive development: The control and construction of hierarchies of skills. Psychological Review, 87, 447-531.

Fleming, J. (1953). The role of supervision in psychiatric training. Bulletin of the Menninger Clinic, 17 157-159.

Gaoni, B. & Neumann, M. (1974). Supervision from the point of view of the supervisee. American Journal of Psychotherapy, 24, 108-114.

Hess, A.K. (1986). Growth in supervision.: Stages of supervisee and supervisor development. The Clinical Supervisor, 4, 51-67.

Heppner, P.P. & Roehlke, H.J. (1984). Differences among supervisors at different levels of training: Implications for a developmental model of supervision. Journal of Counseling Psychology, 31, 76-90.

Hersey, P. & Blanchard, K. (1982). Management of organizational behavior: Utilizing human resources. William Morrow & Co., Inc.

Hill, C.E., Charles, D. & Reed, K.G. (1981). A longitudinal analysis of changes in counseling skills during doctoral training in counseling psychology. Journal of Counseling Psychology, 23, 254-258.

Hillerbrand, E. (1989). Cognitive differences between experts and novices: Implications for group supervision. Journal of Counseling and Development, 67, 293-296.

Hoffman, L. (1985). Beyond power and control: toward a "second order" family systems therapy. Family Systems Medicine, 3(4). 381-396).

Hogan, R.A. (1964). Issues and approaches in supervision. Psychotherapy Theory Research and Practice, 1, 139-141.

Holloway, E.L. (1987). Developmental models of supervision: Is it development? Professional Psychology: Research and Practice, 18, 209-216.

Holloway, E.L., Freund, R.D., Gardner, S.L., Nelson, M.L. & Walker, B.R. (1989). Relation of power and involvement to theoretical orientation in supervision: An analysis of discourse. Journal of Counselling Psychology. Vol 36, 1, 88-102.

Holloway, E.L. & Wampold, B.E. (1983). Patterns of verbal behavior and judgments of satisfaction in the supervision interview. Journal of Counseling Psychology, 30, 227-234.

Holloway, E. & Wolleat P. (1980). Relationship of counselor conceptual level to clinical hypothesis formation. Journal of Counseling Psychology, 6, 539-545.

Horan, J.JH. (1972). Behavioral goals in systematic counselor education. Counselor Education and Supervision, 11, 286-291.

Ivey, A.E. (1987). Developmental therapy. San Francisco: Jossey-Bass.

Ivey, A.E. & Authier, J (1978). Microcounseling: Innovations in interviewing, counseling, psychotherapy, and psychoeducation (2nd ed,) Springfield, Il: Charles C Thomas

Kachigan, S.K. (1986) Statistical Analysis: An interdisciplinary introduction to univariate & multivariate methods. NY: Radius Press.

Kagan, N. (1975). Interpersonal process recall: A method of influencing human interaction. East Lansing, MI: Michigan State University.

Kell, B. L., & Burrow, J.M. (1970). Developmental counseling and therapy. Boston: Houghton Mifflin.

Kohlberg, L. (1969). Stage and sequence: A cognitive developmental approach to socialization. In D.A. Goslin (Ed.), Handbook of Socialization Theory and Research. Chicago: Rand McNally.

Lanning, W.L. (1986). Development of the Supervisor Emphasis Rating Form. Counselor Education and Supervision, 25, 191-196.

Leddick, Geaorge R. & Bernard, Janine M. (1980) The history of supervision: A critical review. Counselor Education and Supervision, 19,3.

Littrell, J.M., Lee-Borden, N. & Lorenz, J.A. (1979). A developmental framework for counseling supervision. Counselor Education and Supervision, 19, 129-136.

Loevinger, J. (1976). Ego development: Conceptions and theories. San Francisco: Jossey-Bass.

Loganbill, C. & Stoltenberg, C. (1983). The case conceptualization format: A training device for practicum. Counselor Education and Supervision, 22, 235-240.

Miars, R.D., Tracey, T.J., Ray, P.B., Cornfield, J.L., O'Farrell, M. & Gelso, C.J. (1983). Variation in supervision process across trainee experience levels. Journal of Counseling Psychology, 30, 403-412.

Mueller, W.J. & Kell B.I. (1972). Coping with conflict: Supervising counselors and therapists. Englewood Cliffs, NJ: Prentice Hall.

Norusis, Marija A. (1985). Advanced statistic guide, spss-x. McGraw Hill Book Company, NY.

Patterson, C.H. (1964). Supervising students in the counseling practicum. Journal of Counseling Psychology, 11, 47-53.

Perry, W.G. (1970). Forms of intellectual and ethical development in the college years. New York: Holt, Rinehart & Winston.

Piaget, J. & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.

Raphael, R.D. (1982). Supervisee experience: The effect on supervisor verbal responses. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.

Reising, G.N., & Daniels, M.H. (1983). A study of Hogan's model of counselor development and supervision. Journal of Counseling Psychology, 30, 235-244.

Selfridge, F.F. & others (1975). "Sensitivity oriented versus didactically oriented inservice counselor training." Journal of Counseling Psychology, 22, 156-159.

Sloane, R.B., Staples, F.R., Cristol, A.H., Yorkston, N.J. & Whipple, K. (1975). Short term analytically oriented psychotherapy vs. behavior therapy. Harvard University Press, Cambridge, Ma.

SPSS Inc. (1986). Spss-x. SPSS Inc, Chicago, Il.

Stoltenberg, C. (1981). Approaching supervision from a developmental perspective: The counselor complexity model. Journal of Counseling Psychology, 28, 59-65

Stoltenberg, C. and Delworth, U. (1987). Supervising counselors and therapists: A developmental approach. San Francisco: Jossey-Bass.

Truax, C.B. & Carkhuff, R.R. (1967) Toward effective counseling and psychotherapy: Training and practice. Chicago: Aldine, 1967.

Weinstein, G. & Alschuler, A. (1985). Education and counseling for self knowledge development. Journal of Counseling and Development, 64, 19-25.

Wessler R.L. & Ellis A. (1980). Supervision in counseling: Rational emotive therapy. The Counseling Psychologist, 11, 43-49.

Wideman, J. (1970). Growth and development in counselor education. Unpublished doctoral dissertation, Harvard University, Cambridge

Wiley, M.O'L. & Ray, P.B. (1986). Counseling supervision by developmental level. Journal of Counseling Psychology, 33, 439-445.

Worthington, E.L. (1984). An empirical investigation of supervision of counselors as they gain experience. Journal of Counseling Psychology, 31, 63-75.

Worthington, E.L. (1987). Changes in supervision as counselors and supervisors gain experience: A review. Professional Psychology: Research and Practice, 18, 189-208.

Young, F.W. (1975). An asymmetric euclidean model for multiprocess asymmetric data. Proceedings of the US-Japan Seminar on Multidimensional Scaling.